

# RECEIVED



**Westinghouse  
Electric Corporation**

Roger E. Wills Jr.  
Assistant General Counsel and  
Group Manager

Law and Environmental  
Affairs Department

11 Stanwix Street  
Pittsburgh Pennsylvania 15222-1384  
412 642 5815  
Fax 412 642 3923

January 30, 1997

***VIA FEDERAL EXPRESS***

Mr. Pat Evangelista  
Emergency and Remedial Response Division  
U. S. Environmental Protection Agency  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

Re: *Diamond Alkali Superfund Site, Passaic River Study Area*

Dear Mr. Evangelista:

This letter constitutes Westinghouse Electric Corporation's ("Westinghouse") Response to the U.S. Environmental Protection Agency's Request for Information in the above-captioned matter. Without waiving any of its objections and rights hereinafter identified, Westinghouse provides the following:

**GENERAL OBJECTIONS**

1. Westinghouse objects to the Request for Information ("the Request") on the grounds and to the extent that the Request seeks to impose upon Westinghouse obligations relating to the identification and disclosure of confidential information that are different from, other than, or in addition to, those obligations set forth in 40 C.F.R., Part 2 and CERCLA Section 104(e)(7).
2. Westinghouse objects to the Request on the grounds that it implies or infers responsibility with respect to hazardous substances that is different from or broader than that imposed by Section 107 of CERCLA, 42 U.S.C. §9607 or Section 7003 of RCRA, 42 U.S.C. §6873.
3. Westinghouse objects to the Request on the grounds and to the extent that it seeks to impose upon Westinghouse obligations relating to the investigation for, disclosure of, and representations concerning any information responsive to the Request that are different from, other than, or in addition to Section 104 of CERCLA, 42 U.S.C. §9604 or Section 3007 of RCRA, 42 U.S.C. §6972.
4. Westinghouse objects to the Request for Information on the grounds and to the extent that it attempts to impose upon Westinghouse obligations contrary to the provisions of Article III of the United States Constitution and Title 28 of the United States Code.

**845990003**

## **RESPONSES AND SPECIFIC OBJECTIONS**

EPA-identified Westinghouse Facility: Relay Instrument Division : 95 Orange Street, Newark, New Jersey

1. How long has your company operated at the facility designated above? If your company no longer operates at this facility, during what years did your company operate at the facility?

RESPONSE: Westinghouse Electric Corporation began operations at the Orange Street facility in 1891 and continued until 1983, when it sold the facility and moved the operations to another state. In 1989, Westinghouse sold the entire Relay Instrument Division.

2. a.) Does your company have or has it in the past had a permit or permits issued pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §6901 et seq.? If "yes," please provide the years that your company held such a permit and its EPA Identification Number.

b.) Does your company have or has it in the past had a permit or permits issued pursuant to the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq.? If "yes," please provide the years that your company held such a permit.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it no longer operates the facility, so any permit or identification numbers would be invalid. Nevertheless, Westinghouse responds that the EPA Identification Number for the Orange Street facility was NJD004383485. Westinghouse was a customer of the Passaic Valley Sewage Commissioners and participated in effluent surveys from the Commissioners on at least two occasions in the early 1970s (See "Exhibit A," attached). It also appears that the Westinghouse Orange Street facility held an Industrial Sewer Connection permit issued by the PVSC, as evidenced by a 1982 permit (also attached within "Exhibit A"). Westinghouse has been unable to locate any other information concerning the years in which the Orange Street facility maintained permits under RCRA, FWPCA, or any other state, local, or Federal regulation. Westinghouse reserves its right to supplement this Response should additional information or documents be located.

3. Did your company receive, utilize, manufacture, discharge, release, store or dispose of any materials containing the following substances:

2,3,7,8 Tetrachlorodibenzo-p-dioxin or other dioxin compounds  
Benzene

Bromides (if "yes," please list specific compounds)

**Chlorides** (if "yes," please list specific compounds)

**Methylene Chloride**

**Ferric Chloride**

**Hydrochloric Acid**

**Nickel Chloride**

Ethyl Benzene

Polyaromatic Hydrocarbons (if "yes," please list specific compounds)

Sulfates (if "yes," please list specific compounds)

**Toluene**

**Xylene**

PCBs

Aluminum

Arsenic

Cadmium

**Chromium (Chromic Acid)**

**Copper**

**Iron**

**Lead**

Manganese

**Mercury**

**Nickel**

**Phosphorus (Phosphoric Acid)**

Silicon

Silver

**Tin**

Titanium

**Zinc (Zinc Oxide)**

**Cyanide (Sodium Cyanide, Zinc Cyanide, Copper Cyanide)**

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it may have used those materials listed above in bold text, in the course of its manufacturing. For additional information, including specific quantities, please see the documents attached as "Exhibit A;" in particular, those under the subheadings of "Manufacturing Process Information" and "Waste Management and Handling."

4. a.) Provide a description of the manufacturing processes for which all hazardous substances, including, but not limited to, the substances listed in response to item (3), were a product or by-product.

b.) During what parts of the manufacturing processes identified in response to items (4a), above, were hazardous substances, including, but not limited to, the substances listed in response to item (3), generated?

- i.) Describe the chemical composition of these hazardous substances.
- ii.) For each process, what amount of hazardous substances was generated per volume of finished product?
- iii.) Were these hazardous substances combined with wastes from other processes? If so, wastes from what processes?

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that any documents that it has located concerning the manufacturing processes of the Relay Instrument Division have been attached as "Exhibit A," under the subheading of "Manufacturing Process Information." Should additional information or documents be located, Westinghouse reserves its right to supplement this Response.

5. Describe the methods of collection, storage, treatment, and disposal of all hazardous substances, including, but not limited to, the substances listed in response to items (3) and (4). Include information on the following:

a.) Identify all persons who arranged for and managed the processing, treatment, storage, and disposal of hazardous substances.

b.) If hazardous substances were taken off-site by a hauler or transporter, provide the names and addresses of the waste haulers and the disposal site locations.

c.) Describe all storage practices employed by your company with respect to all hazardous substances from the time operations commenced until the present. Include all on-site and off-site storage activities.

- i.) If drums were stored outside, were the drums stored on the ground or were they stored on areas that had been paved with asphalt or concrete? Please provide a complete description of these storage areas.
- ii.) When drums were stored outside, were empty drums segregated from full drums?

d.) What processes do you use to treat your waste? What do you do with the waste after it is treated?



RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that any responsive documents have been attached as "Exhibit A" under the subheading "Waste Management & Handling." Westinghouse further responds that it has identified, through documents, the following individuals who may possess knowledge responsive to this Request. However, Westinghouse is in the process of confirming whether or not these individuals are still living, and if so, where they currently reside.

General Managers: M. W. Mardiss, E. C. Becnel, A. J. Petzinger

Works Engineering: S. C. Iannaccone, E. K. Hennel, R. Zeiller

Receiving: J. F. Morgan (Supervisor)

Manufacturing Engineers: P. S. Safran

Product Engineers: C. J. Michelini (Quality Manager), W. T. Buck, M. Maxwell, J. B. MacLean, G. J. Marieni, W. E. Rich, W. A. Elmore, W. F. Clark, L. Husak, R. G. Lakin

With respect to waste haulers and/or transporters, Westinghouse responds that it has identified several companies, but does not have sufficient information to determine how long these firms were used by the Orange Street facility. The identified firms include: CECOS International (transporter & facility), Bill's Waste Oil Service (transporter), B&L Corporation (facility), Baron Blakeslee (transporter & facility), Scavenger (transporter), Scientific Chemical Processing (transporter), L. Pucillo & Sons (transporter), JEM Metal Company (scrap buyer), Rockwell, Inc. (scrap buyer), and P. Pepe & Sons (paper scrap). Any documents addressing these waste facilities and transporters, which Westinghouse has located, are attached as "Exhibit A" under the subheading "Waste Management & Handling." Westinghouse reserves its right to supplement any and all parts of this Response, should it locate additional information or documents.

6. a.) For process waste waters generated at the facility which contained any hazardous substances, including, but not limited to, the substances listed in response to items (3) and (4):

- i.) Was the waste stream discharged into a sanitary sewer and if so, during what years?
- ii.) Were they treated before being discharged to the sanitary sewer and if so, how? Please be specific.
- iii.) If the waste waters were not discharged to the sanitary sewer, where were they disposed and during what years?
- iv.) Please provide the results of any analyses performed on any waste process streams generated at the facility.

b.) For floor drains or other disposal drains at the facility:

- i.) Did the drains connect to a sanitary sewer and if so, during what years?
  - ii.) If the floor drains or other disposal drains at the facility were not discharged to the sanitary sewer, where did they discharge and during what years?
- c.) Did any storm sewers, catch basins, or lagoons exist at any time at the facility and if so, during what years?
  - i.) If catch basins or lagoons existed, were they lined or unlined?
  - ii.) What was stored in the lagoons?
  - iii.) Where was the discharge from any of these structures released and during what years? Was this discharge treated before its release and if so, how and during what years? What was the chemical composition of any waste waters released and during what years?
- d.) Please supply diagrams of any waste water collection, transport, or disposal systems on the property.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that any documents it has located which are responsive to this Request are attached as "Exhibit A" under the subheading of "Sewer and Easement Issues." Should additional information or documents be located, Westinghouse reserves its right to supplement this Response.

7. a.) For each hazardous substance, including, but not limited to, the substances listed in response to item (3) or identified in response to item (4), above, provide the total amount generated during the operation of the facility.

b.) Were any hazardous substances, including, but not limited to, the substances listed in item (3) or identified in response to item (4), above, ever disposed of in the Passaic River or discharged into the Passaic River? If yes, identify the hazardous substances, estimate the amount of materials discharged to or disposed of in the Passaic River and the frequency with which this discharge or disposal occurred. Also, please include any sampling of the river which you might have done after any discharge or disposal.

RESPONSE: Please see Westinghouse's Response to Request No. 6.

8. a.) Please identify any leaks, spills, explosions, fires, or other incidents of accidental material discharge that occurred at the facility during which or as a result of which, any

hazardous substances listed in response to item (3) or (4), were released on the property, into the waste water or storm drainage system at the facility or to the Passaic River. Provide any documents or information relating to these incidents, including the ultimate disposal of any contaminated materials.

b.) Please provide the results of any sampling of the soil, water, air, or other media after any such incident and before and after clean-up. Please provide in this information all sampling performed for or by NJDEP.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it has not located any information or documents indicating or suggesting that any leaks, spills, explosions, fires or other incidents of accidental material discharge occurred at the facility and were subsequently released on to the Orange Street property, the waste water or storm drainage system or to the Passaic River. Westinghouse does, however, reserve its right to supplement this Response, should it locate information or documents which indicate to the contrary.

9. a.) Was your facility ever subject to flooding? If so, was the flooding due to:

- i.) overflow from the sanitary or storm sewer backup, and/or
- ii.) flood overflow from the Passaic River?

b.) Please provide the date and duration of each flood event.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it has not located any information indicating that the Orange Street facility was ever subject to flooding or to flood damage.

10. Please provide a detailed description of any civil, criminal, or administrative proceedings against your company for violations of any local, State, or Federal laws or regulations relating to water pollution or hazardous waste generation, storage, transport, or disposal. Provide copies of all pleadings and depositions or other testimony given in these proceedings.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the

Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it is involved in litigation arising from the purchase of the Orange Street facility by the New West Urban Renewal Company. This litigation was filed in the Federal District Court for the District of New Jersey (*New West Urban Renewal Co. v. Westinghouse Electric Corp.*, DC NJ, No. 94-1033). Westinghouse further states that, if necessary, it will make appropriate responsive documents available to the USEPA for inspection and copying at the Westinghouse Building, 11 Stanwix Street, Pittsburgh, PA 15222 at a mutually convenient time; notwithstanding which Westinghouse believes any costs incurred by USEPA to obtain or review such documents is inconsistent with the NCP.

11. Provide a copy of each document which relates to the generation, purchase, use, handling, hauling, and/or disposal of all hazardous substances, including, but not limited to, the substances listed in items (3) or (4). If you are unable to provide a copy of any document, then identify the document by describing the nature of the document (e.g. letter, file memo, invoice, inventory form, billing record, hazardous waste manifest, etc.). Describe the relevant information contained therein. Identify by name and job title the person who prepared the document. If the document is not readily available, state where it is stored, maintained, or why it is unavailable.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it ceased operations at the Orange Street facility nearly 15 years ago and it is unlikely that all of the documents relating to waste handling (such as manifests) are still in existence. Any documents that Westinghouse has located, which are responsive to this Request, have been attached as "Exhibit A" under the subheading of "Waste Management and Handling." Westinghouse reserves its right to supplement this Response, should additional information or documents be located.

12. a.) Did you or anyone else sample the soil, groundwater, surface water, ambient air, or other environmental media at the facility for purposes other than those identified in questions above?

b.) If so, please provide all other documents pertaining to the results of these analyses.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague,

ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that any documents it has located pertaining to sampling of soil, groundwater, surface water, ambient air, or other environmental media have been attached to these Responses in "Exhibit A." Should additional responsive sampling information be located, Westinghouse reserves its right to supplement this Response.

13. a.) Has your company owned the facility at the location designated above? If so, from whom did your company purchase the property and in what year? If your company subsequently sold the property, to whom did your company sell it and in what year? Please provide copies of any deeds and documents of sale.

b.) If your company did not own the facility, from whom did your company rent the facility and for what years? Please provide copies of any rental agreements.

c.) To the extent that you know, please provide the names of all parties who owned or operated the facility from 1940 through the present. Describe the relationship, if any, of each of those parties with your company.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that it began operations at the Orange Street facility in 1891. During the first part of the twentieth century, it purchased additional land and continued to expand the facility, which it owned. In 1983, the facility was sold to the New West Urban Renewal Company and the Relay Instrument Division operations were moved to another state. Westinghouse further states that, if necessary, it will make appropriate responsive documents available to the USEPA for inspection and copying at the Westinghouse Building, 11 Stanwix Street, Pittsburgh, PA 15222 at a mutually convenient time; notwithstanding which it believes any costs incurred by USEPA to obtain or review such documents is inconsistent with the NCP.

14. Answer the following questions regarding your business or company. In identifying a company that no longer exists, provide all the information requested, except for the agency for service of process. If your company did business under more than one name, list each name.

a.) State the legal name of your company.

b.) State the name and address of the president or the chairman of the board, or other presiding officers of your company.

c.) Identify the state of incorporation of your company and your company's agent for service of process in the state of incorporation and in New Jersey.

d.) Provide a copy of your company's Certificate of Incorporation and any amendments thereto.

e.) If your company is a subsidiary or affiliate of another company, or has subsidiaries, or is a successor to another company, identify these related companies. For each related company, describe the relationship to your company; indicate the date and manner in which each relationship was established.

f.) Identify any predecessor organization and the dates that such company became part of your company.

g.) Identify any other companies which were acquired by your company or merged with your company.

h.) Identify the date of incorporation, state of incorporation, agents for service of process in the state of incorporation and New Jersey, and nature of business contact, for each company identified in the responses to items 14 (e), (f), and (g), above.

i.) Identify all previous owners or parent companies, address(es), and the date change in ownership occurred.

RESPONSE: Westinghouse objects to this Request on the grounds that it seeks to impose obligations relating to the investigation for and disclosure of information responsive to the Request that are different from, other than, or in addition to those obligations set forth in Section 104 of CERCLA. Westinghouse further objects to this Request on the grounds that it is vague, ambiguous, overbroad, and unduly burdensome. Without waiving the foregoing General and Specific Objections, Westinghouse responds that the legal name of the Respondent is *Westinghouse Electric Corporation*. Its principal place of business and headquarters is 11 Stanwix Street, Pittsburgh, Pennsylvania 15222. Westinghouse is a publicly-traded corporation, organized and incorporated in the Commonwealth of Pennsylvania on April 9, 1872. With respect to its subsidiaries and affiliates, Westinghouse attaches as "Exhibit B," a recent list of its wholly and partially-owned subsidiaries. With respect to its corporate organization, a copy of its 1995 Annual Report is attached as "Exhibit C." Westinghouse's registered agent for service of process in New Jersey is CT Corporation. However, any future correspondence concerning this Site should be directed to the undersigned, as provided in Response No. 15. also.

15. Provide the name, address, telephone number, title, and occupation of the person(s) answering this "Request for Information" and state whether such person(s) has or have personal knowledge of the responses. In addition, identify each person who assisted in any way in responding to the "Request for Information" and specify the question to which each person assisted in responding. Please include the names and addresses of former employees who were contacted to respond to any of the questions.

RESPONSE: The person filing this response on behalf of Westinghouse is Roger E. Wills, Assistant General Counsel. Mr. Wills may be reached at the following address and phone number:

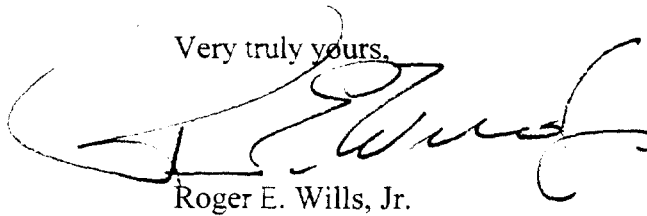
Westinghouse Electric Corporation  
11 Stanwix Street  
Pittsburgh, PA 15222  
Phone: 412-642-5815

Facsimile: 412-642-3923

In addition to Mr. Wills, the following persons assisted in the preparation of these Responses: Beth A. MacManus, Legal Assistant; William McElravy, Records Center Manager; Patrick Seybert, Records Center Supervisor; and Leslie Kenzevich, Legal Assistant.

As stated above, should Westinghouse locate additional persons, information, and/or documents which would be responsive to this Information Request, Westinghouse reserves its right to supplement these Responses. In the meantime, should you have any questions or wish to discuss this matter further, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Roger E. Wills, Jr.', is written over a horizontal line. The signature is fluid and cursive.

Roger E. Wills, Jr.

Enclosures

cc: Ms. Amelia Wagner (USEPA)  
Ms. Beth A. MacManus /

***Diamond Alkali Co.  
Passaic River Site***

***NJD980528996***

**THIS DOCUMENT “Westinghouse Electric Corporation’s response to the USEPA’s request for information, dated January 30, 1997” IS CURRENTLY CLASSIFIED AS NON-CONFIDENTIAL BY EPA.**

**Kedari Reddy**  

---

**Office of Regional Counsel**

**07/10/2003**  

---

**Date**



**Exhibit A**  
**Westinghouse Electric Corporation**

## **Index to Exhibit A: Westinghouse Electric Corporation**

### **Property Information**

Undated	Property Map: 95 Orange Street, Newark, New Jersey
Undated	Property Map: 1908-1962 Modernization Program
Undated	Property Map: Property Plan (excerpts)
03/01/74	Property Map: Sewer Sample Check Points
05/07/82	Westinghouse Memo re: Sewage Sampling
12/13/83	CECOS, International Report re: PCB Sampling
02/03/84	CECOS, International Closeout Report

### **Manufacturing Process Information**

Undated	Baron Blakeslee Conveyor Type Steam Heated Vapor Degreaser (modifications)
08/25/61	Process Specification: Inks for Instrument/Meter Recording Apparatus
07/27/82	Administrative Consent Order (NJDEP): Air Pollution/Emissions
08/12/82	Bureau of Air Pollution Control (NJDEP) Application (2)
08/18/82	Handwritten Notes re: Emulsion Cleaner (includes 1964 Process Specification)
09/13/82	NJDEP Notice of Incomplete Air Pollution Control Permit Application
10/11/82	Westinghouse Letter to NJDEP re: equipment forms
10/25/83	Westinghouse Letter re: achievement of compliance in re: ACO of 7/27/82

### **Waste Management & Handling**


03/11/70	Westinghouse Memorandum re: Environmental Pollution at Newark facility
09/24/71	Westinghouse Environmental Control Survey: Newark
06/12/72	U.S. Testing Co. Sampling Results: Water/Wastewater Analysis (2)
01/11/77	NJDEP/EPA Air Pollution Control Survey
10/30/79	Westinghouse Memorandum re: SPCC Plan/Oil Pollution Prevention
06/09/80	Westinghouse Environmental Control Survey: Newark
07/13/81	Westinghouse Industrial Hygiene Audit Report: Newark
12/21/82	EPA Generator Annual Hazardous Waste Report
01/01/84	NJDEP-Bureau of Hazardous Waste Generator's Annual Report

### **Sewer & Easement Issues**

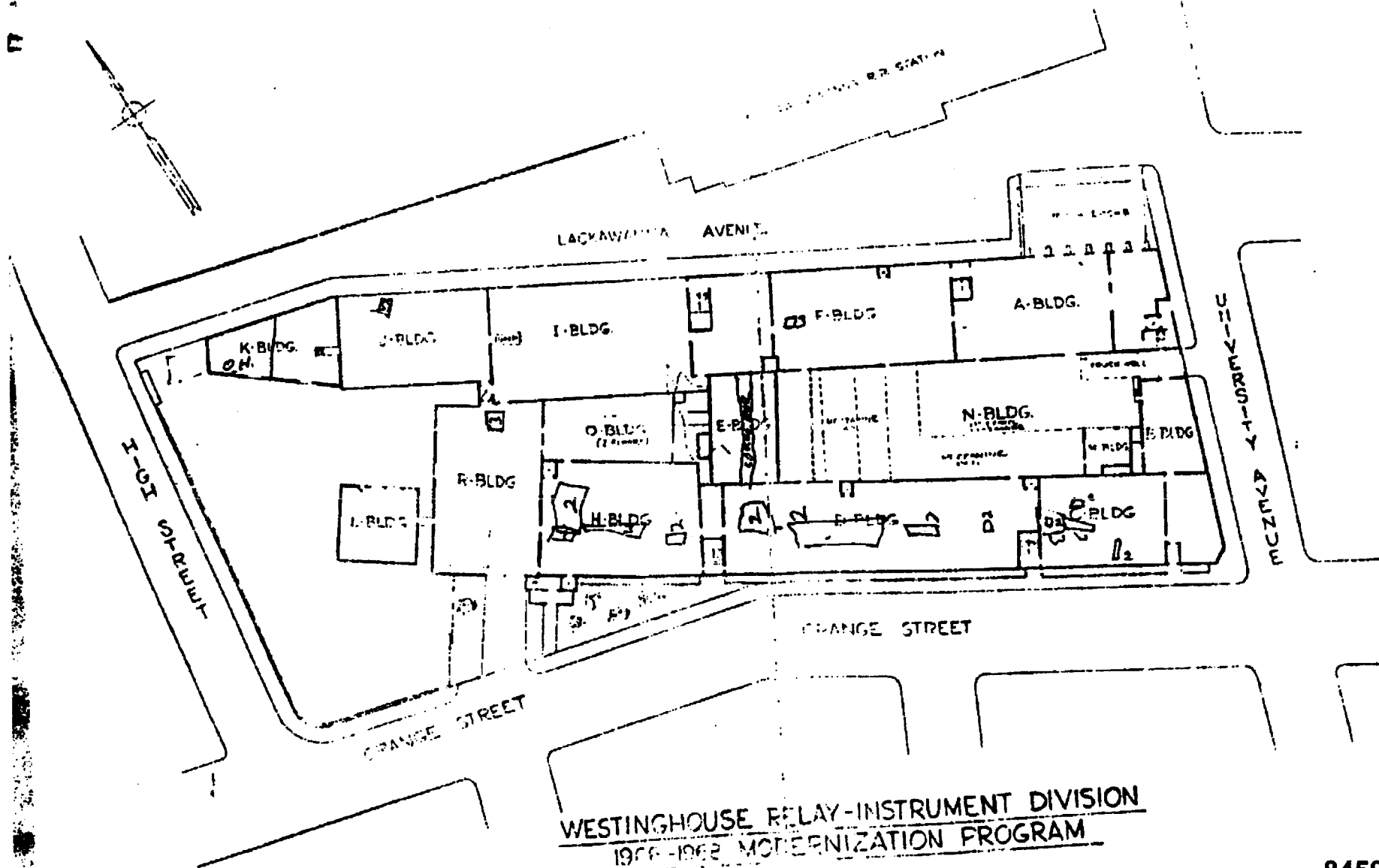
Undated	Property Maps (2)
03/05/70	Extracts from Revised Ordinances of Newark, 1951
07/11/72	Passaic Valley Sewerage Commissioners ("PVSC") Waste Effluent Survey
10/03/72	Westinghouse Memorandum re: 1972 PVSC Waste Effluent Survey
03/19/75	PVSC Waste Effluent Survey
03/20/75	Westinghouse Memorandum re: 1975 PVSC Waste Effluent Survey
08/01/76	PVSC Letter re: New Sewerage Connection Regulations
01/06/77	PVSC Letter to Westinghouse re: Heavy Metals Survey
02/06/81	PVSC Application for Sewer Connection
02/13/81	Westinghouse Letter to PVSC re: Revised Sewer Connection Application
03/19/81	PVSC Notice re: Pretreatment Standards for Mercury
10/28/81	U.S. Testing Co. Wastewater Sample Results: 95 Orange Street, Newark
11/04/81	Westinghouse Letter to PVSC re: Monitoring and Composite Sampling Proposals
01/14/82	PVSC Industrial Sewer Connection Permit: 95 Orange Street, Newark
03/09/82	CFM Letter to City of Newark re: Sampling System Installation, 95 Orange Street
03/17/82	City of Newark Letter to CFM re: Additional Requirements/Requests
03/25/82	City of Newark Map: Orange Street Easement (2)
04/08/82	Westinghouse Letter to PVSC re: Delay in Sewage Sampling Installations
05/17/82	Westinghouse Memorandum re: 95 Orange Street Sewage Sampling Points
06/25/82	Westinghouse Letter to PVSC re: Sewer Sampling, Plant Operation Status
10/07/82	City of Newark Ordinance Granting Westinghouse Request for Sewer Easement
11/12/82	City of Newark Letter Enclosing Ordinance
11/23/82	Westinghouse Letter to PVSC re: pH Readings
11/24/82	PVSC Letter to Westinghouse re: recent pH Readings
12/03/82	Westinghouse Letter to PVSC clarifying pH Readings, Request
01/12/83	Westinghouse Letter to PVSC re: Monitoring for pH
03/23/83	Westinghouse Letter to PVSC re: Monitoring for pH Update
04/28/83	PVSC Record of Changes to Treatment Works Rules/Regulations
08/23/83	Westinghouse Memorandum re: Sewage Sampling Easement

**Exhibit A**  
**Property Information**

THIS MAP CAN BE FOUND IN THE SITE FILE LOCATED AT: U.S. EPA SUPERFUND RECORDS  
CENTER, 290 BROADWAY, 18<sup>TH</sup> FLOOR, NY, NY 10007

Westinghouse Electric Corporation		
TITLE PLANT PRINT		
DATE	9-16-79	SHEET NO. 1 OF 1
DRAWN BY	APD	
SCALE	AS SHOWN	

845990017



845990019

SACHANANNA RAILROAD STATION

~~CONFIDENTIAL~~

PRIVILEGED

PRIVILEGED

PROPERTY AREA - ACRES  
 3.0513  
 PARCEL NO. 4000  
 TOTAL 3.45.3

832/8016539

NO. 1000	DATE 10-10-50	APPROVED	DATE 10-10-50
NO. 1000	DATE 10-10-50	APPROVED	DATE 10-10-50
NO. 1000	DATE 10-10-50	APPROVED	DATE 10-10-50
NO. 1000	DATE 10-10-50	APPROVED	DATE 10-10-50

REVISIONS	
NO. 1000	DATE 10-10-50
NEWARK, N. J. METER WORKS PROPERTY PLAN	
NEWARK ELECTRIC CORPORATION ENGINEERING DEPARTMENT	
DATE 10-10-50	
BY: [Signature]	

845990020

LACAWANNA

PRIVILEGED

ORANGE PLACE 30

PARCEL - W  
300 1100' - 1100' - 1100'

PAID 1980

ALBION RD.

PAVING STREET

PAVING

NOTE: ALL DISTANCES SHOWN ARE APPROXIMATE

ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE

ALL DISTANCES SHOWN ARE APPROXIMATE

ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE  
ALL DISTANCES SHOWN ARE APPROXIMATE

08328016539A



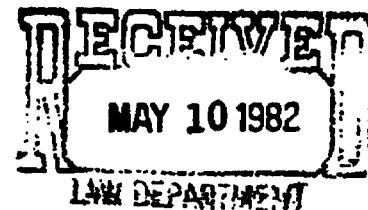




82-1-00-

**PRIVILEGED**

From Newark Relay-Instrument Division  
WIN 326-2478  
Date May 7, 1982  
Subject Re: Sewage Sampling



to PITTSBURGH-GATEWAY ROOM 858

Attorney Michele Gutman

Dear Michele:

Enclosed are:

- a) Two copies of letter received from the City of Newark. On one copy, I have comments (in red) on information I assume is needed in the blanks (in blue).
- b) A copy of survey drawing with associated description.
- c) A copy of our property plan, #42.

Paragraphs 3 and 4 of the Newark letter (Ordinance) refer to the items you had been concerned about. I am not sure what "the Map of the Commissioners" is (Paragraph 1). Is that a map the City has or could our 42 act as that?

Of course, I'm curious if this really requires an ordinance with its built-in delays, if the insurance is normal, if the \$150 fee is in line, etc.

Please advise if I can help you to help us.

P. S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

ENVIRONMENTAL, INC.

*This copy to  
Walter Becker  
Westinghouse Electric Corporation  
Westinghouse building.  
Gateway Center  
Pittsburg. PA 15222*

December 13, 1983

Westinghouse Electric Company  
Chatam Center Office Building  
P.O. Box 1017  
Pittsburg, Pennsylvania 15230

Attention: Mr. B. A. Kerns

Dear Mr. Kerns:

Enclosed are the results of the tests for concentration of polychlorinated biphenyls for samples taken at the Westinghouse's Newark facility.

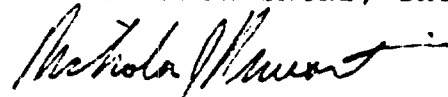
All samples showed less than 50 parts per million (ppm). The Environmental Protection Agency considers concentrations of less than 50 ppm to non PCB.

All samples were taken by the wipe method. The sample areas were measured 10 cm x 10 cm. A pre-weighed filter pad, dampened with benzene, was wrapped around a wood block and used to wipe the sample area. The filter paper was then placed into glass sample bottles and sent to RECRA Research, Inc.

If you have any questions, or if any clarifications are necessary, please do not hesitate to contact us.

Sincerely,

CECOS Environmental, Inc.



Nicholas J. Prevosti  
Project Supervisor  
NY-NJ Metropolitan Branch

NJP:kb  
Attachment

845990023



Wipe Samples in  $\mu\text{g}/100\text{cm}^2$   
per Nucleon. Procedure on 12/19/83  
written will follow.

1 -  $50\mu\text{g}/100\text{cm}^2$

2 - 20 "

3 - 30 "

4 - 40 "

5 - 30 "

6 - 10 "

W. C. Becker  
WIN 235-3969

Sample	PPM	Sample Location
1	20	<u>Plant Area A1.</u> All three samples were taken within 5' of the south wall in the capacitor inspection area of the inspection room. These sample areas are marked by grooves scratched into the tile floors with the sample number scratched into the tile next to each corresponding location.
3	10	
2	10	
4	10	<u>Plant Area F2.</u> Screw machine department oil collection area. This sample was taken in the center of the room on the south side of the main center corridor and is marked by nails in the wood floor at each corner of the 10 cm x 10 cm sample area.
5	10	<u>Plant Area I2.</u> Milling machine department. This sample was taken 5' east of the west wall and 20' south of the north wall. It is marked by nails in the wood floor at each corner of the 10 cm x 10 cm sample area.
6	20	<u>Plant Area J1.</u> Chemistry lab. This sample was taken from the middle lab bench near the eye wash station. It is marked by a groove scratched into the bench top.

## ANALYTICAL RESULTS

CECOS INTERNATIONAL, INC.  
GAS CHROMATOGRAPHY

Report Date: 12/7/83

SAMPLE IDENTIFICATION	PARAMETER (UNITS OF MEASURE)
	TOTAL POLYCHLORINATED BIPHENYLS (ug/lb A7 AROCLOR 1242)
Sample #1 <i>Building A1 capacitor inspection area</i>	<20
Sample #2 <i>Building A1 capacitor inspection area</i>	<10
Sample #3 <i>Building A1 capacitor inspection area</i>	<10
Sample #4 <i>Dept. #2 arrow machine dept. oil collection area</i>	<10
Sample #5 <i>Dept. I2 milling machine area</i>	<10
Sample #6 <i>Dept. J1 chemistry and dye lab.</i>	<20

## COMMENTS:

Analyses were performed according to U.S. Environmental Protection Agency methodologies where applicable.

The chromatograms of the samples were qualitatively screened for the presence of nine PCB mixtures (Aroclors). These included Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, 1262, and 1268.

The values reported as "less than" (<) indicate the working detection limit for the particular sample and/or parameter.

FOR NIECA ENVIRONMENTAL LABORATORIES

DATE

845990026

## ANALYTICAL RESULTS

CECOS INTERNATIONAL, INC.  
GAS CHROMATOGRAPHY  
QUALITY CONTROL

Report Date: 12/7/83

PCB RECOVERY ANALYSIS OF  
METHOD BLANK

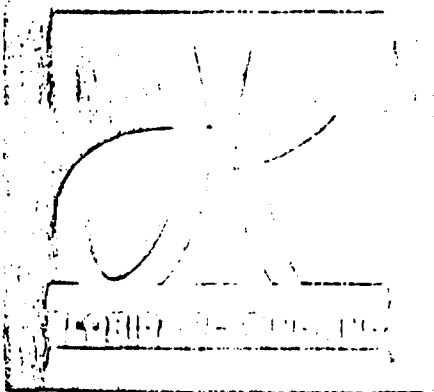
COMPOUND IDENTIFICATION	ng OF SPIKE	ng RECOVERED	% RECOVERY
Aroclor 1242	1.0	1.2	120

FOR RECRA ENVIRONMENTAL LABORATORIES

DATE

Melanie J. Davis  
12/7/83

845990027



3253 - 46th Avenue North  
St. Petersburg, Florida 33714  
Phone (813) 526-9056

November 11, 1983

Westinghouse Electric Corporation  
95 Orange Street  
Newark, New Jersey 07101

Attention : Mr. Jack Morgan

Dear Mr. Morgan,

Thank you for this opportunity to bid on the removal of your metal finishing equipment. We feel that our proposal will have the following benefits for Westinghouse:

1. removal of equipment at Florida Plating, Inc. expense ( with disconnecting of services by Westinghouse personnel).
2. removal of plating solutions now contained in drums and plating tanks; proprietary chemicals (brighteners, cleaners, etc., that have not been used); proper labeling and final shipment via common carrier to our facility in St. Petersburg, Florida (at Florida Plating, Inc. expense).
3. removal, labeling, proper packaging and shipment to Florida Plating, Inc., of identifiable laboratory chemicals that support plating operations ( i.e. Reagent Grade chemicals for solution titration but specifically NOT solvents) at expense of Florida Plating, Inc.
4. payment by Florida Plating, Inc. to Westinghouse of \$5,000.00 for salvage rights to following areas and equipment:
  - A. entire plating facility to include all tanks, barrels, rectifiers, hoist, hoist rails, electrical starters, exhaust hoods, coils, controls and all support equipment for rack and barrel plating (to include all spare parts, maintenance items, etc.), all anodes and baskets, and copper bussing, and floor boards.
  - B. Udyllite Jr. automatic and all support equipment such as rectifier, racks, automatic rack loader, exhaust hoods, and copper bussing.
  - C. paint booth (20' long), dispatch gas fired oven, all rolling

racks, Barrett centrifuge and support equipment and 7' oven (electric)(all contained in one room).

- D. major components of conveyORIZED paint system consisting of various paint booths, conveyor system, spare parts, paint pots, spray guns, air lines and fittings, blowers, pumps, motors, and support equipment including ovens.
- E. barrel tumbling equipment adjacent to plating area, to include all horizontal barrel and oblique deburring equipment, motors, starters, and all support equipment.
- F. contents of caged area adjacent to plating room consisting of chemicals, pumps, tanks, scales, etc.
- G. contents of lab pertaining to support of plating such as 50 amp Rapid rectifier, balance, at least 2 lab tables with sinks, and at least 2 chemical hood systems and support equipment.
- H. all remaining 220 volts and 110 volt ovens with capacity to exceed 375<sup>0</sup> F (except heat treat area).
- I. at least one 1200<sup>0</sup> F oven (small) located in heat treat area.
- J. Rockwell Tester located in heat treat area.
- K. Ultrasonic unit located in heat treat area.
- L. remaining pallet racks located in shipping area.
- M. 2 stainless tanks (in room with fork truck rechargers)
- N. at least 6 hand pallet movers (pallet jacks)
- O. Daniels Oblique barrel equipment (located in machine department) including platform scale.
- P. contents of caged maintenance area adjacent to the laboratory to include all spare parts for plating equipment, all equipment for plating department, work benches to include lathe, grinder, drill press, etc.
- Q. impregnation unit with vacuum pump
- R. water sampling units



Jack, our approach to Westinghouse is to remove for reuse, chemicals, equipment, floor boards, lab chemicals, etc., rather than have Westinghouse in the position of classifying said items to be disposed. As we all know disposal classification entails Federal, State and City permitting, record keeping, hauling away and disposing of these same items at great expense and exposure to Westinghouse. Classification and sale for reuse eliminates all this environmental hassle. Please assure Westinghouse personnel that Florida Plating, Inc., has in use the necessary waste treatment equipment to treat the waste from the use of these items and we are properly permitted.

Jack, we appreciate the courtesies you have extended to us especially the time you have given on our trips to your Newark facility. We trust this proposal will meet with your approval.

Sincerely,



C. David Roach  
Sales Manager &  
Technical Representative



**CECOS**  
**ENVIRONMENTAL, INC.**

1 Edgewater Place  
Staten Island, NY 10305  
(212) 446-8555

December 13, 1983

Westinghouse Electric Company  
Chatam Center Office Building  
P.O. Box 1017  
Pittsburg, Pennsylvania 15230

Attention: Mr. B. A. Kerns

Dear Mr. Kerns:

Enclosed are the results of the tests for concentration of polychlorinated biphenyls for samples taken at the Westinghouse's Newark facility.

All samples showed less than 50 parts per million (ppm). The Environmental Protection Agency considers concentrations of less than 50 ppm to non PCB.

All samples were taken by the wipe method. The sample areas were measured 10 cm x 10 cm. A pre-weighed filter pad, dampened with benzene, was wrapped around a wood block and used to wipe the sample area. The filter paper was then placed into glass sample bottles and sent to RECRA Research, Inc.

If you have any questions, or if any clarifications are necessary, please do not hesitate to contact us.

Sincerely,

CECOS Environmental, Inc.

Nicholas J. Prevosti  
Project Supervisor  
NY-NJ Metropolitan Branch

NJP:kb  
Attachment

Sample	PPM	Sample Location
1	20	<u>Plant Area A1.</u> All three samples were taken within 5' of the south wall in the capacitor inspection area of the inspection room. These sample areas are marked by grooves scratched into the tile floors with the sample number scratched into the tile next to each corresponding location.
3	10	
2	10	
4	10	<u>Plant Area F2.</u> Screw machine department oil collection area. This sample was taken in the center of the room on the south side of the main center corridor and is marked by nails in the wood floor at each corner of the 10 cm x 10 cm sample area.
5	10	<u>Plant Area I2.</u> Milling machine department. This sample was taken 5' east of the west wall and 20' south of the north wall. It is marked by nails in the wood floor at each corner of the 10 cm x 10 cm sample area.
6	20	<u>Plant Area J1.</u> Chemistry lab. This sample was taken from the middle lab bench near the eye wash station. It is marked by a groove scratched into the bench top.

## ANALYTICAL RESULTS

CECOS INTERNATIONAL, INC.  
GAS CHROMATOGRAPHY

Report Date: 12/7/83

SAMPLE IDENTIFICATION	PARAMETER (UNITS OF MEASURE)
	TOTAL POLYCHLORINATED BIPHENYLS (ug/g AS AROCLOR 1242)
Sample #1 <i>Building A2 capacitor inspection area</i>	<20
Sample #2 <i>Building A1 capacitor inspection area</i>	<10
Sample #3 <i>Building A3 capacitor inspection area</i>	<10
Sample #4 <i>Dept. B2 screw machine dept. oil collection area</i>	<10
Sample #5 <i>Dept. I2 milling machine area</i>	<10
Sample #6 <i>Dept. J1 chemistry and dye lab.</i>	<20

## COMMENTS:

Analyses were performed according to U.S. Environmental Protection Agency methodologies where applicable.

The chromatograms of the samples were qualitatively screened for the presence of nine PCB mixtures (Aroclors). These included Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, 1262, and 1268.

The values reported as "less than" (<) indicate the working detection limit for the particular sample and/or parameter.

FOR RECRA ENVIRONMENTAL LABORATORIES

DATE

*Laborator J. Pravis*  
*12/7/83*

ANALYTICAL RESULTS

CECOS INTERNATIONAL, INC.  
GAS CHROMATOGRAPHY  
QUALITY CONTROL

Report Date: 12/7/83

PCB RECOVERY ANALYSIS OF  
METHOD BLANK

COMPOUND IDENTIFICATION	ng OF SPIKE	ng RECOVERED	% RECOVERY
Aroclor 1242	1.0	1.2	120

FOR RECRA ENVIRONMENTAL LABORATORIES

DATE

Michael J. Harris  
12/7/83



February 3, 1984

The Westinghouse Electric Company  
95 Orange Street  
Newark, New Jersey 07102

Attention: Mr. C. J. Michellini

Dear Mr. Michellini:

CECOS Environmental, Inc. would like to thank you for the opportunity to assist Westinghouse in the environmentally safe closing of the Newark facility.

Services that were provided by CECOS are outlined below. Please refer to the enclosed map (see Appendix 1) for locations referred to by floor number and building letter codes. A table at the end of this report lists material descriptions, disposal methods, and product codes.

Broken tiles containing enveloped asbestos in areas J5, C3, D3, H3, F3, C2, D2, and H2 were vacuumed or swept up. Speedi-dri and other inert material contaminated with oil was vacuumed or swept up. Any residual oil was soaked up with fresh speedi-dri and removed. This procedure was used in areas F2, I2, and between H2 and D2.

Asbestos fire curtains in the basement of R Building and in A2 were removed and included in lab packed drums. See Appendix 2 for information on lab packs.

Vapor degreasers which used 1,1,1,-Trichloroethane in areas O1 and I1 were scraped and the residual was removed.

The floor of the northwest corner of N1 and the floor of the laboratory in J5, along with the floor of I1, were steam cleaned with a five percent solution of Penetone cleaner and water.

The floor and table tops of the laboratory in J1 were wiped or mopped with a five percent solution of Penetone cleaner and water, and then rinsed.

Paint spray booths in R1 and N1 were scraped, then the paint residue and sludge were removed.

Over bricks in F3, which contained enveloped asbestos, were removed.

Three oil basins in N1 containing oil, metal shavings, and absorbent, were scraped. The residue was solidified and drummed.

845990035

Ferric Chloride dust on the floor of the southeast corner of D3 was swept up, then the floor was mopped with a five percent solution of Penetone cleaner and water and, finally, rinsed.

The CECOS team removed all material from the entire building and outside storage yard that was considered to be hazardous waste as defined by the Code of Federal Regulations (CFR 40 Part 261 and CFR 49 Parts 171 and 172). These materials were collected in area R1 and packaged according to the CFR 49 Parts 171, 172, and 177.

Any material in containers of five gallons or smaller were consolidated into compatible groups and lab packed. Please refer to Appendix 2 for details on lab packing. Material in containers larger than five gallons were shipped in their original containers or repackaged.

Due to the toxic nature of three fifty-five gallon drums of Benzene and two hundred pounds of Sodium Cyanide special precautions must be taken to insure correct disposal methods and compliance with all local and federal laws. As a result, these materials must remain at the Newark facility until they are approved for disposal.

One 55 gallon drum of Endox L76, two 55 gallon drums of Bonderite D108 replenisher, and a drying booth contaminated with zinc, nickel, aliphatic hydrocarbons and cyanide must also remain at the Newark facility. These items were only discovered or brought to the attention of CECOS late in the plant closing. The approval procedure for these items is being rushed and, upon approval, they will be removed. Please be assured that every effort is being made to expedite the removal of these materials.

Following is a list of material descriptions, disposal methods, and product codes of hazardous wastes that have been removed from the Westinghouse Newark Facility:

Material	Disposal Method	Product Code
Empty drums once containing machine and cutting oil	Crushed and landfilled at CECOS International's Secure Chemical Management Facility (SCMF) EPA ID #NYD080336241	9181-001-A
Machine oil sludge (solidified)	Drummed and landfilled at the SCMF	9181-001-B
1,1,1,-Trichloroethane	Reclamation	9181-001-C
Trichloroethylene	Reclamation	9181-001-D
Toluene	Incineration	9181-001-E

Material	Disposal Method	Product Code
Xylene	Incineration	9181-001-G
Acetone	Incineration	9181-001-H
Lab pack	SCMF	9181-001-J
Solidified paint sludge	SCMF	9181-001-K
Nickel chloride, steel, and brass	SCMF	9181-001-L
Parts from nickel plating tank	SCMF	9181-001-M
Empty drums once containing caustic soda or phosphoric acid	Crushed and buried at SCMF	9181-001-R
Anchor wash	Waste Water Treatment	9181-001-X
Nitric acid	Waste Water Treatment	9181-001-Z
Phosphoric acid	Waste Water Treatment	9181-001-AE
Hydrochloric acid	Waste Water Treatment	9181-001-AG
Sulfuric acid	Waste Water Treatment	9181-001-AH
Lacquer thinner	Incineration	9181-001-AJ
Sodium hydroxide	SCMF	9181-001-AK
Kerosene	Incineration	9181-001-AL
Machine and cutting oil (pumpable)	Fuels blending and reclamation	9181-001-AM
Asbestos	SCMF	9181-001-AR
Sodium cyanide	Waste Water Treatment	Pending
Benzene	Incineration	Pending
Bonderite D18CR	Waste Water Treatment	Pending
Endox L76	Waste Water Treatment	Pending
Drying booth contaminated with zinc, nickel, aliphatic hydrocarbons and cyanide	SCMF	Pending



All materials were, or will be, shipped in compliance with CFR 49 Parts 171, 172, and 177. Upon removal of the pending material an inventory and amount of each product shipped and disposed of will be sent to Westinghouse's Environmental Affairs Department.

Sincerely,

CECOS Environmental, Inc.



Nicholas J. Prevosti  
Project Supervisor  
NY-NJ Metropolitan Branch

NJP:kb

Attachment

cc: W. Becker (Westinghouse)

K. Webster

J. Boccuzzi

**Exhibit A**  
**Manufacturing Process Information**



Westinghouse Electric Corporation

Measurements Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 461-4000

Baron Blakeslee Conveyor Type Steam  
Heated Vapor Degreaser

**PRIVILEGED**

VEM-004, Supplemental Data

A free board chiller coil will be added in the degreaser.  
Externally, a chiller unit will be installed to provide the  
necessary cooling.

Additional work will include draining and flushing the system,  
replacing contaminated piping, adjusting thermostat, etc. The  
water separator will be cleaned and a heat exchanger added.

Overlapping flaps and front doors will be added.

The still will be modified to accommodate trichloroethane.

832/8016089

845990040



Westinghouse Electric Corporation

Measurements Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 465-3222

Semi-Automatic Open Top Degreaser

VEM-004 Supplemental Data

**PRIVILEGED**

A free board chiller coil will be added in the degreaser. Externally a chiller unit will be installed to provide the necessary cooling.

Additional work will include draining and flushing the system, replacing contaminated piping, adjusting thermostats, etc. The water separator will be modified and cleaned and a heat exchanger will be added.

The tank sides will be extended up to provide .75 free board ratio, the piston operated carrier will be rebuilt to fit inside the chiller coil and an overlapping flap type housing will be built over the superstructure to enclose the tank top.

The still used with this equipment will be cleaned and modified.

832/8016090

845990041

# Westinghouse

MASTER COPY  
RETURN TO FILE

ELECTRIC CORPORATION



Process Specification 292760  
(Stating Dash Number)

1st Rev.: August 25, 1961

## INKS FOR INSTRUMENT AND METER RECORDING TYPE APPARATUS

37

SAFETY REQUIREMENTS: See Safe Practice Data Sheets A-9, A-8.

<u>Designation</u>	<u>User</u>	<u>Former Specification</u>	<u>Description</u>
292760-1	NE	115217	Red ink
-2	NE	290869	" "
-3	NE	290921	" "
-4	NE	115465	" "
-5	NE	290295	" "
-6	NE	290506	" "
-7	NE	115463	" "
-8	NE	115464	" "
-9	NE	185321	Green ink
-10	NE	290477	" "
-11	NE	290478	" "
-12	NE	240278	" "
-13	NE	290761	" "
-14	NE	240211	" "
-15	NE	115480	" "
-16	NE	290100	Blue ink

-17, -18, -19 SEE ATTACHED

### 1. MIXING (SEE TABLE I FOR FORMULAS):

292760-1: Put alcohol 51100BA00A (5635) (SPDS A-9) and distilled water into a 5 gal bottle (Corning #710). Add glycerin 51100EJ00A (1746-1) until bottle is filled to batch mark. Add dyes to bottle. Mount a 2 in. dia, 4 bladed stirrer within 1 in. of bottom of bottle and mix at high speed for 5 minutes. Stop and remove stirrer. Stopper bottle and shake bottle to wash down any dye from inside neck. Remount stirrer and continue mixing for 10 minutes additional. Remove stirrer. Stopper bottle and place bottle in storage. Record date of manufacture.

292760-2, -4, -5, -9, -10, -11, -12, -13: Weigh glycerin 51100EJ00A (1746-1) into a 4000 cc beaker. Add alcohol 51100BA00A (5635) (SPDS A-9), distilled water, and acetic acid 51001AE00A (6491-1) (SPDS A-8) if required. Add dyes. Mount a 2 in. dia, 4 bladed stirrer within 1 in. of bottom of beaker and mix at high speed for 15 minutes. Be sure that all dyes are incorporated into ink. Transfer ink into a 1 gal, brown bottle S#1340233, stopper bottle and place bottle in storage. Record date of manufacture.

292760-3: Put alcohol 51100BA00A (5635) (SPDS A-9) and glycerin 51100EJ00A (1746-1) in a 5 gal bottle (Corning #710). Add distilled water until bottle is filled to batch mark. Add dye and gum arabic to bottle. Mount a 2 in. dia, 4 bladed stirrer within 1 in. of bottom of bottle and mix at high speed for 5 minutes. Stop and remove stirrer. Stopper

bottle and shake bottle to wash down any dye from inside neck. Remount stirrer and continue mixing for 55 minutes additional. Remove stirrer. Stopper bottle and place bottle in storage. Record date of manufacture.

292760-6,-16: Put alcohol 51100BA00A (5635) (SPDS A-9) if required, glycerin 51100EJ (1746-1) and acetic acid 51001AE00A (6491-1) (SPDS A-8) if required, into a 5 gal bot (Corning #710). Add distilled water until bottle is filled to batch mark. Add dyes bottle. Mount a 2 in. dia, 4 bladed stirrer within 1 in. of bottom of bottle and mix high speed for 5 minutes. Stop and remove stirrer. Stopper bottle and shake bottle wash down any dye from inside neck. Remount stirrer and continue mixing for 10 minutes additional. Remove stirrer. Stopper bottle and place bottle in storage. Record date of the manufacture.

292760-7,-8,-14,-15: Put acetic acid 51001AE00A (6491-1) (SPDS A-8) if required, into 4000 cc beaker. Add alcohol 51100BA00A (5635) (SPDS A-9) and dyes. Mount a 2 in. dia 4 bladed stirrer within 1 in. of bottom of beaker and mix at high speed for 15 minutes. Be sure that all dyes are incorporated into ink. Transfer ink into a 1 gal, brown bottle #1340233, stopper bottle and place bottle in storage. Record date of manufacture.

## 2. STORING:

2.1 Age all inks at room temperature for 28 calendar days.

## 3. FILTERING:

292760-1,-3,-6,-16: Siphon ink within 1/2 in. of bottom of storage bottle. Wash storage bottle thoroughly with 3 rinses of hot water. Filter ink three times through fine porosity Dynel filtering element mounted in a Sethco Filter Pump, Model LSIN-5.

292760-2,-7,-8,-9,-11,-14,-15: Filter ink through #4 Whatman filter paper, using a Buchner funnel and vacuum. Wash storage bottle thoroughly with three rinses of hot water.

292760-4,-5,-10,-12,-13: Filter ink through #40 Whatman filter paper, using a Buchner funnel and vacuum. Wash storage bottle thoroughly with three rinses of hot water.

## 4. BOTTLING AND LABELING:

### 4.1 WASHING BOTTLES:

4.1.1 Place forty-eight 2 fl oz bottles in a rack. Place cover on rack and secure with thumb screw nuts. Immerse in upright position, in hot water until bottles are full. Remove, invert rack, and allow bottles to drain. Repeat three times in fresh, hot water.

4.1.2 All other sizes of bottles shall be washed separately three times in fresh, hot water, drained on a peg board rack and replaced upright in a carton.

4.2 BOTTLING: Fill all styles of inks three at a time by the use of an Ertel Portable Vacuum Bottle Filler. The unit is supplied with 2 handles, one of which will handle up to 2 fl oz bottles and the other over 2 fl oz. In the event of quart bottles, stopper middle spout and fill 2 bottles at a time.

### 4.3 LABELING:

4.3.1 Pack ink according to Dwg 982252.

4.3.2 Remove filled bottle from rack or carton, inspect for fill and put on cap or dropper cap on. Label bottle and place in a carton stamped with the ink style, if required. Place in a shipping carton.

4.3.3 Stamp date of bottling with hour meter inks on label and on carton, if required.

TABLE I

292760	-1	-2	-3	-4	-5	-6	-7	-8
Color	Red	Red	Red	Red	Red	Red	Red	Red
Formula Size	5 Gal	1 Gal	5 Gal	1 Gal	1 Gal	5 Gal	1 Gal	1 Gal
Formula:								
Glycerin	1365	1835	5940	2600	1830	2580	-	-
Red Dye	16714	2312	7484	3276	2306	3251	-	-
Red Dye	102	20	138	-	-	-	124	126
Auramine Dye	-	-	-	35	56.5	215	-	-
Alcohol	-	-	-	-	-	-	124	-
Acetic Acid	560	112	550	200	113	3435	3725	3785
Distilled Water	-	-	92	12	13.5	21.5	62	-
Yellow Dye	-	-	-	-	-	-	-	-
Distilled Water	5100	1835	12435	1000	1830	12890	-	-
Sp Gr at 25 C (77 F)	-	-	-	1.180-4	-	-	-	-
Visc, Densimeter Cup 0 at 25 C (77 F), seconds	-	-	-	117.6-144.5	-	-	-	-

292760	-9	-10	-11	-12	-13	-14	-15	-16
Color	Green	Green	Green	Green	Green	Green	Green	Blue
Formula Size	1 Gal	1 Gal	1 Gal	1 Gal	1 Gal	1 Gal	1 Gal	5 Gal
Formula:								
Glycerin	2653	1830	1835	2600	516	-	-	3685
Green Dye	3343	2268	2312	3276	650	-	-	4643
Green Dye	15.3	15	15.5	15	-	124	126	-
Auramine Dye	-	-	-	-	-	-	-	-
Alcohol	-	15	-	-	-	124	-	-
Blue Dye	112	200	112	200	687	3725	3785	-
Yellow Dye	-	-	-	-	-	-	-	65
Distilled Water	1020	1800	1835	1000	34.1	62	-	46
Sp Gr at 25 C (77 F)	1.183	1.123	1.127	1.175	1.024	-	-	15200
pH	2.5	2.5	2.5	2.7	4.1	-	-	-
Blueprint	No	Slight	No	No	Yes	-	-	-

PB 292760

845990044

REFER TO 09B2252 For Sizes

845990045

	-17	-18	-19
292760	CW BLUE	R.T. RED	CW RED
TOTAL Vol.	1 GAL	1 GAL	1 GAL
FORMULA			
GLYCERIN 51100 E100A	2709g	740ML	1254g
<del>BLUE DYE</del> 34660 AP 10A	14g		
RED DYE CROCEN SCARLET 110090 (34630 AY)	<del>14g</del>	28g	<del>28g</del>
METHYL GLUCAL 51100A100A			1140 ml
DISTILLED WATER	1591 ml	3080 ml	1680 ml
FORMALDEHYDE 51050 EP	15 ml	15 ml	15 ml
MIXING EQUIPMENT - WAREING BLENDER			
FILTER: - 50 Micron #5 SFEAB' COMPANYS (PP) CART RIDGE			
STORE: - 28 DAYS			
FILTER: - ERTTEL VAC. FUNER			
BOTTLE			





*file  
newark air  
orders.*

**PRIVILEGED**

**State of New Jersey**

**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF ENVIRONMENTAL QUALITY  
JOHN FITCH PLAZA, CN627, TRENTON, N.J. 08625**

**IN THE MATTER OF )  
WESTINGHOUSE ELECTRIC CORP., )  
RELAY INSTRUMENT DIVISION )**

**ADMINISTRATIVE  
CONSENT  
ORDER**

The following FINDINGS are made and ORDER issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and duly delegated to the Assistant Director, Enforcement Branch, Division of Environmental Quality pursuant to N.J.S.A. 13:1B-5, N.J.S.A. 13:1D-1 et seq., and N.J.S.A. 26:2C-1 et seq. (the Air Pollution Control Act 1954), and amendments made thereto.

**FINDINGS**

1. A conference was held between the Department of Environmental Protection (hereinafter, "the Department") and Westinghouse Electric Corporation, Relay Instrument Division (hereinafter, "the Corporation") under the authority of N.J.S.A. 26:2C-14 to discuss the provisions of the regulations set forth for emissions in N.J.A.C. 7:27-8.1 et seq. which codes do not set forth speci-

832/8016161

845990046

**PRIVILEGED**

fic limits to the atmosphere and N.J.A.C. 7:27-16.1 et seq. which codes do set forth specific limits for emissions to the atmosphere.

2. The parties are desirous of adjusting their differences and both parties have agreed to the form and content of this Order which is issued pursuant to the provisions of N.J.S.A. 26:2C-14.
3. The parties hereto agree to the disposition of this matter in this manner without any admission by the Corporation of any of said alleged and/or potential violations of N.J.A.C. 7:27-8.1 et seq. and N.J.A.C. 7:27-16.1 et seq.

NOW, THEREFORE, IT IS ORDERED AND AGREED:

4. WESTINGHOUSE ELECTRIC CORP., RELAY INSTRUMENT DIVISION comply with N.J.A.C. 7:27-8.1 et seq. and N.J.A.C. 7:27-16.1 et seq. at the premises known as 95 Orange Street, Lot 40, Block 47, Newark City, Essex County, New Jersey no later than March 15, 1983 and that the Corporation take measures in compliance with N.J.A.C. 7:27-8.1 et seq. and N.J.A.C. 7:27-16.1 et seq., including but not limited to the following schedule for controlling the emissions from the (2) Open Top Vapor Degreasers and the Conveyorized Vapor Degreaser.

845990047

832/8016162

**PRIVILEGED**

mmg  
7/26/82

- | <u>ITEM</u>   | <u>TO BE COMPLETED BY</u> |
|---|---------------------------|
| A. Complete the engineering study and evaluate the proposals.   | August 1, 1982            |
| B. Select the air pollution control equipment and submit the Permit to Construct and Certificate to Operate application(s). | August 15, 1982           |
| C. Purchase the air pollution control equipment after Departmental approval of permit to construct.                         | November 1, 1982          |
| D. Complete the installation of the air pollution control equipment, start-up and debug the entire system.                  | March 15, 1983            |
5. Should compliance with any of the completion dates provided herein be prevented by a cause or causes beyond the control of the Corporation (e.g. equipment delays or delays by third parties acts of God or other similar delays), then upon prompt written notice to the Department, the parties shall adjust the schedule for compliance to the extent necessary by such cause or causes.
6. The Corporation shall maintain and operate all source equipment and air pollution control devices, currently in use, in a manner consistent with the Corporation's approved operating certificate(s).
7. The Corporation shall submit to the Department by August 15, 1982 and thereafter by the fifteenth of every month, a detailed report describing the progress of its air pollution control activities within the terms of this Administrative Consent Order.

**PRIVILEGED**

8. WESTINGHOUSE ELECTRIC CORP., RELAY INSTRUMENT DIVISION hereby consents and agrees to comply with all terms and provisions of this Administrative Consent Order which shall be fully enforceable in the Superior Court of New Jersey upon the filing of a summary action for compliance pursuant to N.J.A.C. 7:27-8.1 et seq. and N.J.A.C. 7:27-16.1 et seq., and also may be enforced in the same fashion as an Administrative Consent Order issued by the Department pursuant to this same statutory authority. WESTINGHOUSE ELECTRIC CORP., RELAY INSTRUMENT DIVISION hereby waives the right to an administrative hearing as provided in N.J.S.A. 26:2C-14.1 or as otherwise provided.

DATED \_\_\_\_\_

Thomas A. Pluta, Assistant Dire  
Division of Environmental Quali  
Enforcement Branch

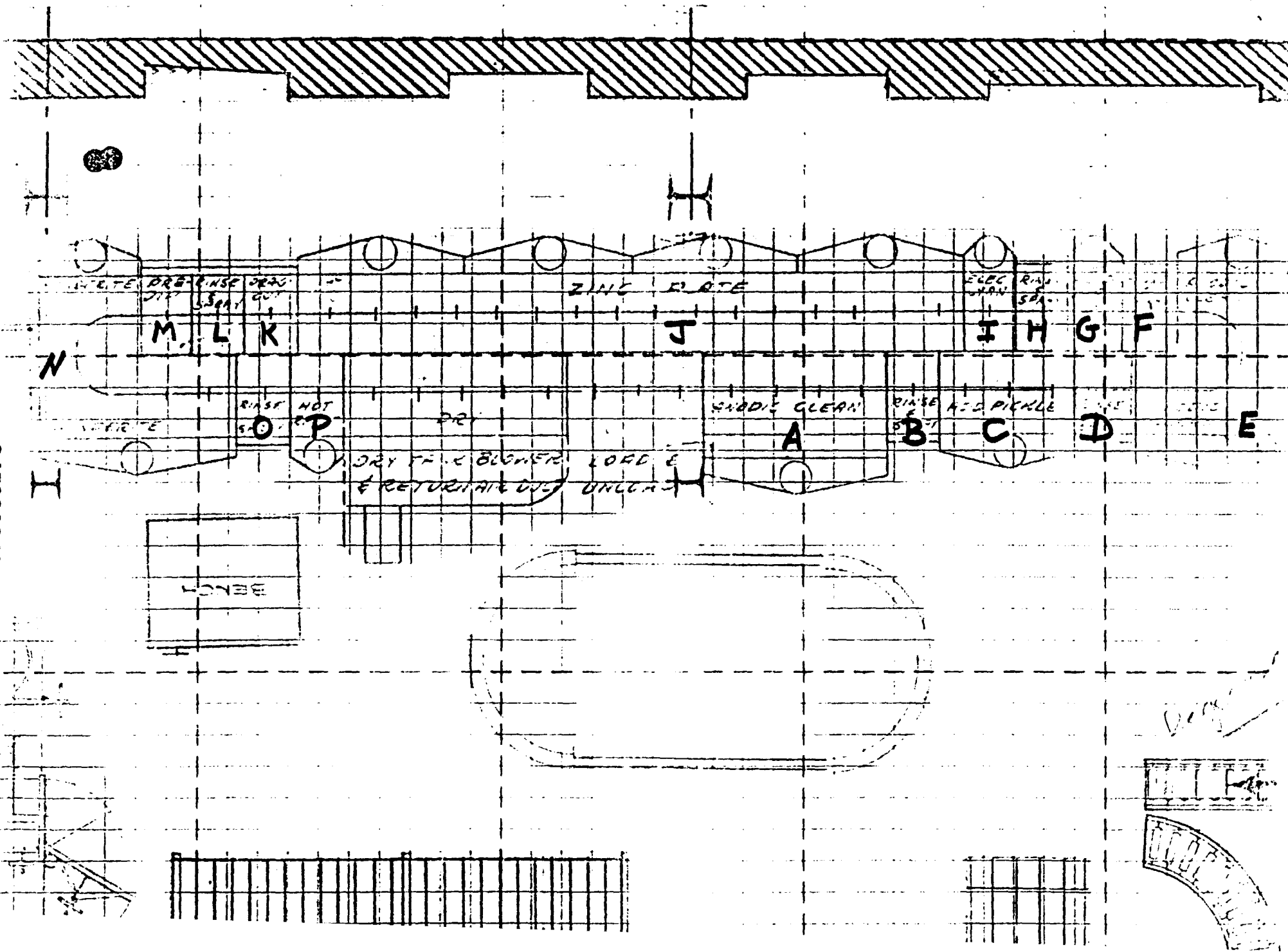
DATED 7/27/82

BY: C. J. Michelini, Jr.  
FOR THE CORPORATION

CASIMIRO J. MICHELINI, JR  
NAME (PRINT OR TYPE)

Plant Manager  
TITLE

**845990050**





## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTSource Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E	<b>SOURCE INFORMATION</b>			
	1. Source Description <u>1 - Steam Treatment Machine, Lindberg Cat #9528</u>			
	2. Operating Schedule	<u>4</u> Hours/Day	<u>960</u> Hours/Year	<u>1980</u> Operation Starting Date
	3. % Annual Production Throughput By Quarter	<u>26</u> Jan-Mar.	<u>26</u> Apr-June	<u>24</u> July-Sept.
SECTION F	4. Volume Of Gas Discharged From This Source (ACFM) <u>800</u>			
	Source Discharge Temperature (°F) <u>107</u>			
	<b>CONTROL APPARATUS ON SOURCE</b>			
	Primary <u>None</u>	Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sour Connectors
SECTION G	Secondary _____			
	Tertiary _____			
	<b>AIR CONTAMINANTS FROM SOURCE</b>			
	CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
	Sunnycrest 112 (Uncompounded	<u>0.144 lbs/hr</u>		<u>Samples</u>
	straight distilled naphthenic	<u>when in</u>		<u>Weighed</u>
	base oil)	<u>operation</u>		
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME  
DESIGNATION OF STACK FROM VEM-003, SIDE 1.Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) 11 Exhaust

(over)

845990051

— )

2. Total Amount	<input checked="" type="checkbox"/> Batch	800	Avg.	4	lb/batch,	hr/batch
Materials Processed	<input type="checkbox"/> Continuous				lb/hr	
3. Raw Materials	% By Wt.		Raw Materials	% By Wt.		
Steel	99.94					
"Sunnycrest 112"	.06					

1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_

2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

### C. INCINERATION

## SECTION H

1. Tank Contents \_\_\_\_\_

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ (10<sup>3</sup> Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
(10<sup>3</sup> Gal.) ☐

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_  
 5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput (10<sup>3</sup> Gal/Yr) \_\_\_\_\_  
 6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below) \_\_\_\_\_  
 7. Color of Tank ☐ White ☐ Other \_\_\_\_\_ Exposed to Sun's Rays ☐ Yes ☐ No  
 8. Insulation Data for Insulated Tanks (Volatile Organic Substances)  
 Type \_\_\_\_\_ Thickness (inches) \_\_\_\_\_ Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

**For Department Use Only**

• • •



**BUREAU OF AIR POLLUTION CONTROL**

**APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT.**

**TO: New Jersey Department of Environmental Protection  
Bureau of Air Pollution Control  
CN-027, Trenton, NJ 08625**

**Read Instructions Before Completing Application**

<b>SECTION A</b>	<b>1. Full Business Name</b> <u>Westinghouse Electric Corporation</u>			
	<b>2. Mailing Address</b> <u>95 Orange St.</u>		<b>Newark</b>	<b>N.J.</b>
	<i>No.</i>	<i>Street</i>	<i>City</i>	<i>State</i>
	<b>3. Division and/or Plant Name</b> <u>Relay-Instrument Division</u>			
	<b>4. Plant Location</b> <u>95 Orange St.</u>		<b>Newark</b>	<b>N.J.</b>
	<i>No.</i>	<i>Street</i>	<i>City</i>	<i>State</i>
	<b>5. Location of Equipment on Premises (bldg., dept., area, etc.)</b> <u>Bldg. I</u>			
	<b>6. Nature of Business</b> <u>Electrical Manufacturing</u>			
	<b>7. Estimated Starting Date of Construction</b> <u>Existing</u>			
<b>8. Date Equipment to be put in use</b> <u>In use now</u>				
<b>9. Plant Contact</b> <u>P. S. Safran</u>		<b>Mfg. Engineer</b>	<b>201-643-1788</b>	
		<i>Name (print or type)</i>	<i>Title</i>	<i>Telephone No.</i>
<b>SECTION B</b>	<b>REASON FOR APPLICATION (Check One)</b>			
	<input type="checkbox"/> New Equipment without Control Apparatus <input checked="" type="checkbox"/> Modification to Existing Equipment <input type="checkbox"/> New Equipment with Control Apparatus <input type="checkbox"/> Modification to Existing Control Apparatus <input type="checkbox"/> New Control Apparatus on Existing Equipment <input type="checkbox"/> Painting Tank White <input type="checkbox"/> Five Year Renewal of Certificate No. (s) <input checked="" type="checkbox"/> Other (Explain) <u>Old equipment, first application.</u>			
<b>SECTION C</b>	<b>STACK INFORMATION (EQUIVALENT STACK INFORMATION)</b>			
	<b>1. Company Designation of Stack (s)</b> <u>I1 Exhaust</u>			
	<b>2. Previous Certificate Numbers (if any)</b> _____			
	<b>3. a. Number of Sources Venting to this Stack</b> <u>54</u> (Complete a separate VEM-004 for each source)			
	<b>b. Number of Stacks Venting Source Operation (s)</b> <u>1</u>			
	<b>4. Distance to the nearest Property Line (ft.)</b> <u>57'</u>			
	<b>5. Stack Diameter (inches)</b> <u>60" x 72"</u>			
	<b>6. Discharge Height Above Ground (ft.)</b> <u>66'</u>			
	<b>7. Exit Temperature of Stack Gases (°F)</b> <u>80</u>			
	<b>8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.)</b> <u>70,000</u>			
<b>9. Discharge Directions</b> <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down				

The information supplied on applications VEM-003 and VEM-004, including the data in supplements, is to the best of my knowledge true and correct.

P. S. Safran  
Name (print or type)

8-12-82 \*  
Date  
Mfg. Engineer  
JHE

***This application will not be processed unless proper fee is submitted.***

**FOR ASSISTANCE CALL (800) 292-6716**

**FOR DEPARTMENT USE ONLY**

**832/8016094**

N.J.I.D.      STACK      LOG NO.      CT. NO.

[ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

FEE VR/10 EVAL IA

\*The form is resubmitted with additional information as requested by the Department. P. S. Safran 10-11-82

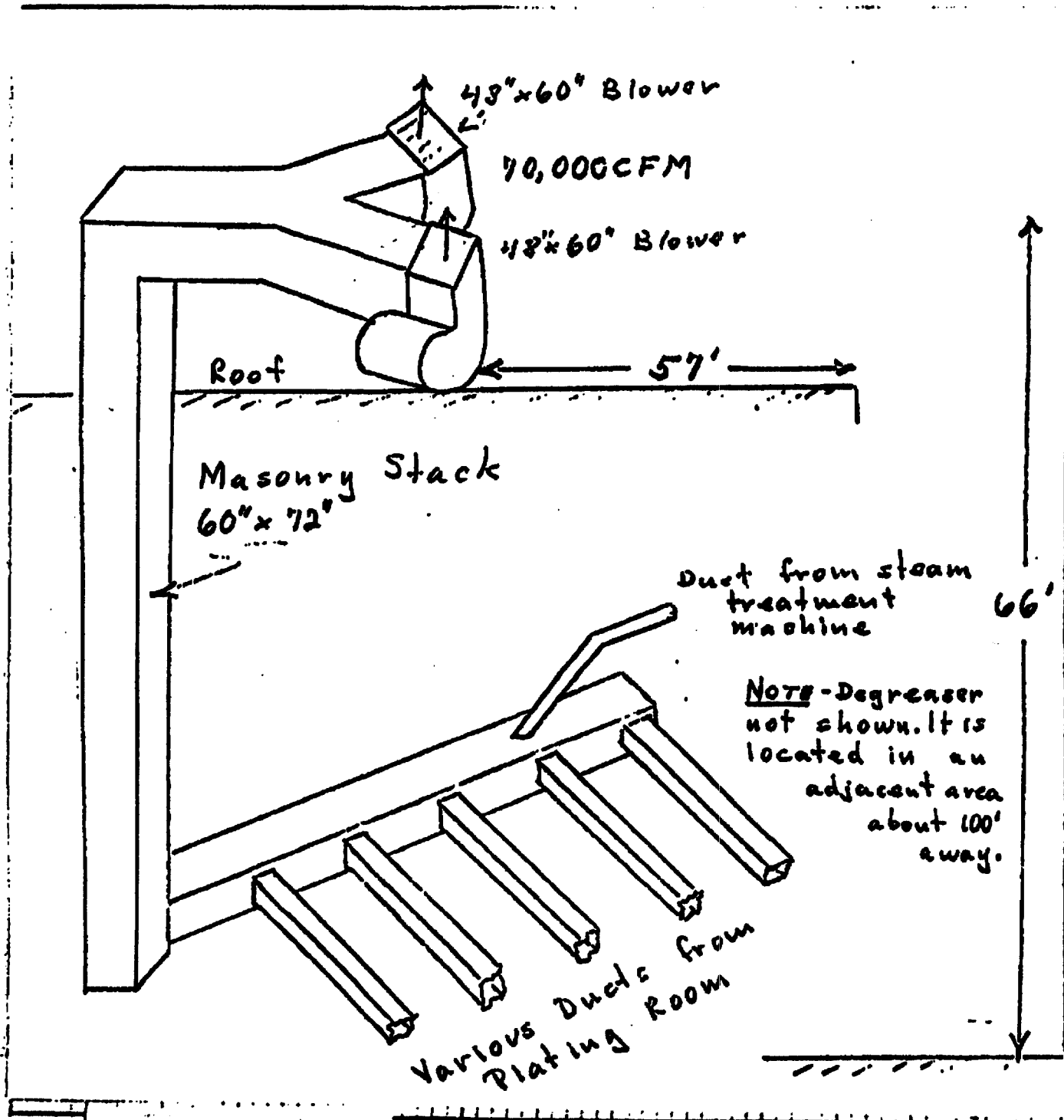
P.S. Safran 10-11-82

**845990053**



**SECTION D DIAGRAM INSTRUCTIONS** - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. **NOTE:** In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature ( $^{\circ}\text{F}$ ) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.

Diagram



832/8016095

845990054



## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTTO: New Jersey Department of Environmental Protection  
Bureau of Air Pollution Control  
CN-027, Trenton, NJ 08625

Read Instructions Before Completing Application

SECTION A	1. Full Business Name	<u>Westinghouse Electric Corporation</u>			
	2. Mailing Address	<u>95 Orange Street</u>	<u>Newark</u>	<u>N.J.</u>	<u>07101</u>
		<small>No. Street</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
	3. Division and/or Plant Name	<u>Relay-Instrument Division</u>			
	4. Plant Location	<u>95 Orange St.</u>	<u>Newark</u>	<u>N.J.</u>	<u>07101</u>
		<small>No. Street</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
	5. Location of Equipment on Premises (bldg., dept., area, etc.)	<u>Bldg N, 1st Floor</u>			
	6. Nature of Business	<u>Manufacturing</u>			
	7. Estimated Starting Date of Construction	<u>Existing</u>			
SECTION B	REASON FOR APPLICATION (Check One)				
	<input type="checkbox"/> New Equipment without Control Apparatus <input type="checkbox"/> New Equipment with Control Apparatus <input type="checkbox"/> New Control Apparatus on Existing Equipment <input type="checkbox"/> Five Year Renewal of Certificate No. (s) <input checked="" type="checkbox"/> Other (Explain) <u>Old equipment, first application</u>				
SECTION C	STACK INFORMATION (EQUIVALENT STACK INFORMATION)				
	1. Company Designation of Stack (s)	<u>N1 Udyllite Exhaust</u>			
	2. Previous Certificate Numbers (if any)	<u>-</u>			
	3. a. Number of Sources Venting to this Stack	<u>2</u>	<u>9</u>	(Complete a separate VEM-004 for each source)	
	b. Number of Stacks Venting Source Operation (s)	<u>1</u>			
	4. Distance to the nearest Property Line (ft.)	<u>55'</u>			
	5. Stack Diameter (inches)	<u>24" x 46"</u>			
	6. Discharge Height Above Ground (ft.)	<u>60'</u>			
	7. Exit Temperature of Stack Gases (°F)	<u>80</u>			
SECTION D	8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.) <u>15,000</u>				
	9. Discharge Directions <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Up <input type="checkbox"/> Down				

The information supplied on applications VEM-003 and VEM-004, including the data in supplements, is to the best of my knowledge true and correct.

P. S. Safran  
Signature  
P. S. Safran  
Name (print or type)

8-12-82  
Date  
Mfg. Engr.  
Title

This application will not be processed unless proper fee is submitted.

FOR ASSISTANCE CALL (609) 292-6716

## FOR DEPARTMENT USE ONLY

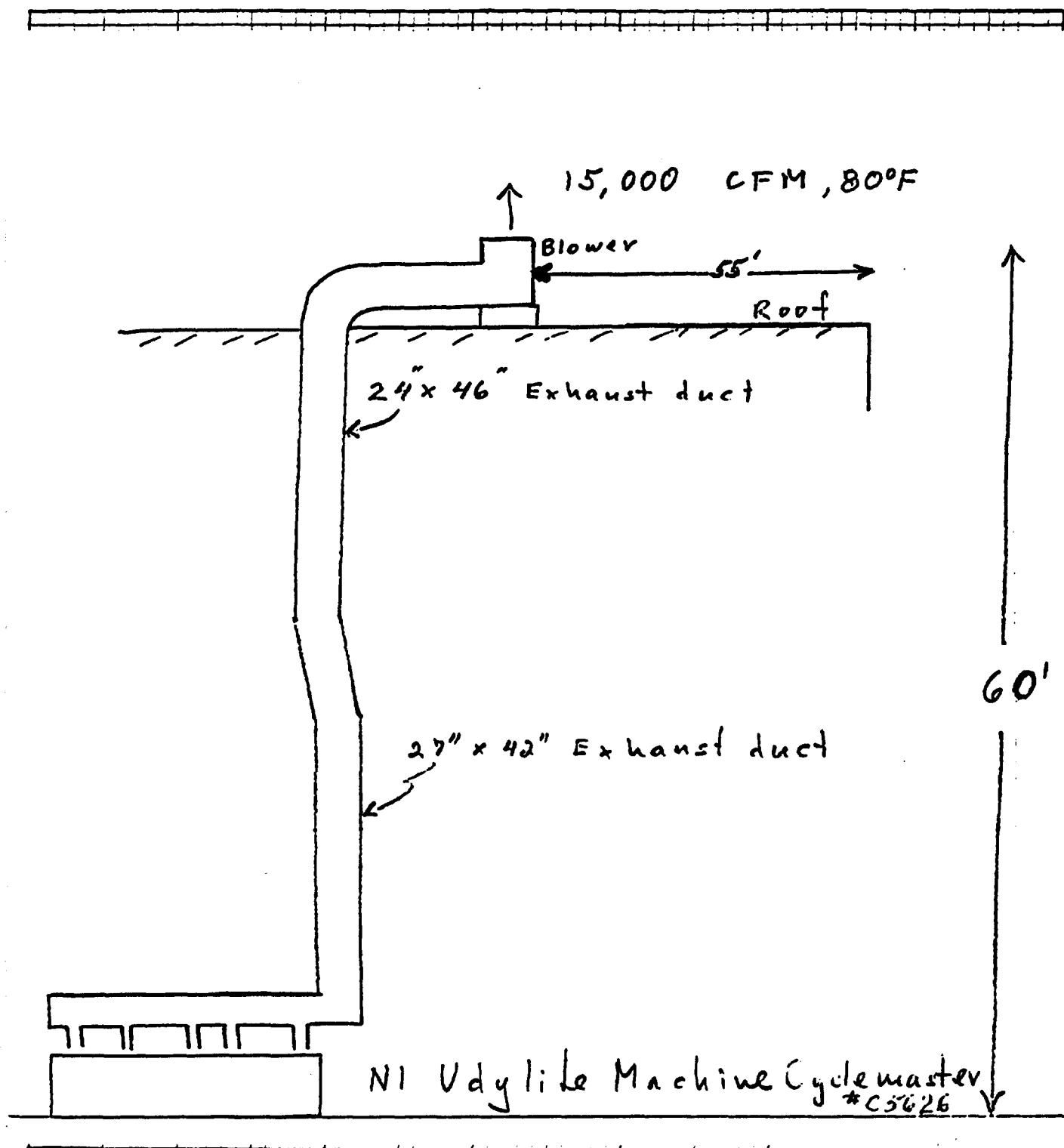
N.J.I.D.	STACK	LOG NO.	CT. NO.
<u>0000</u>	<u>0000</u>	<u>0000</u>	<u>0000</u>

\* For use in connection with the New Jersey Department of Environmental Protection's Supplemental Information System.

845990055

SECTION D DIAGRAM INSTRUCTIONS - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. NOTE: In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature (°F) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.

Diagram



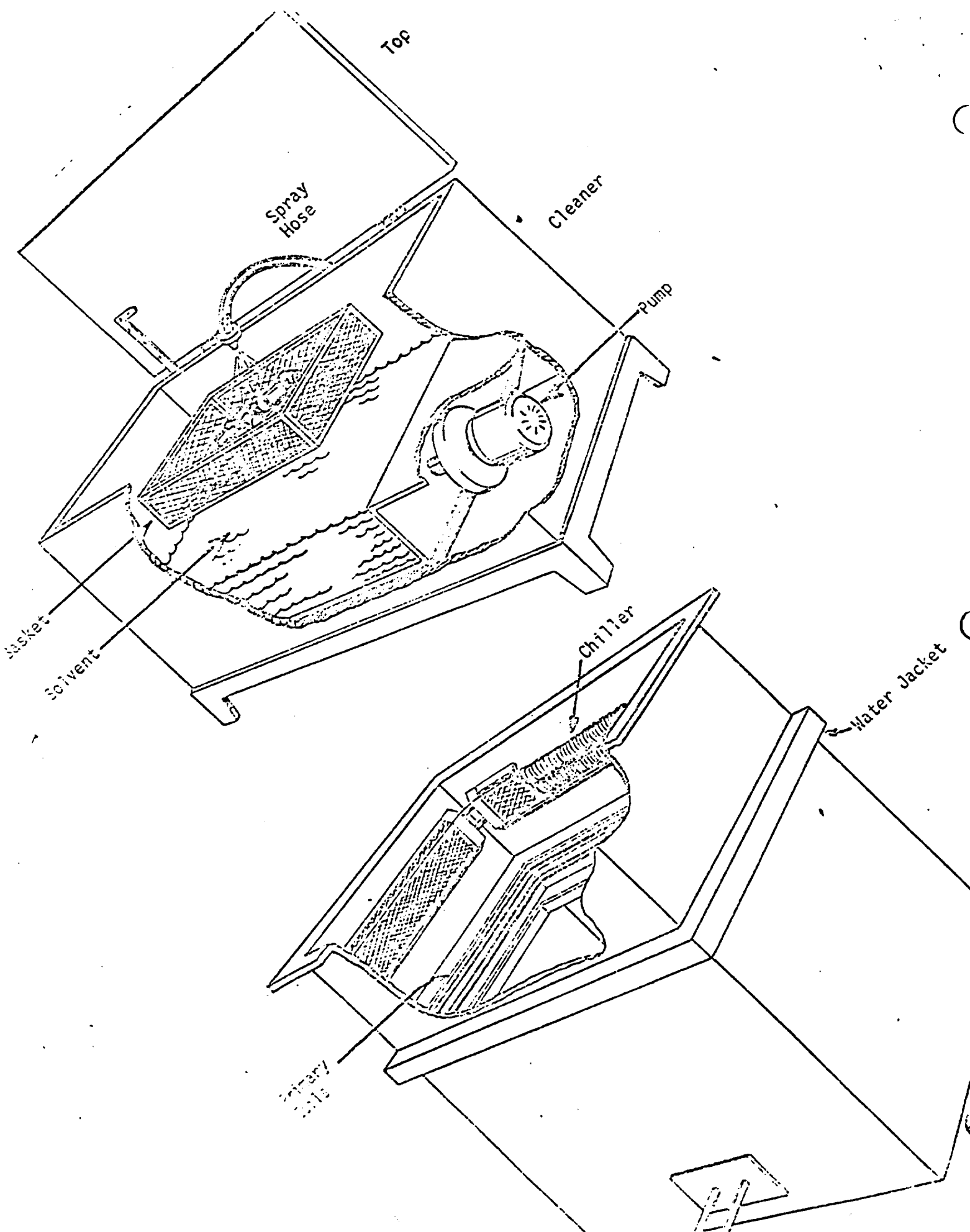
82-4049

# ADDITIONAL INFORMATION FOR DEGREASERS

Please refer to the sketches on the other side and complete the following.

1. Is the degreaser conveyORIZED or non conveyORIZED? Non-conveyORIZED
2. Is the degreaser equipped with a cover, to prevent the vapors from diffusing while not in use? One is planned.
3. What are the dimensions of the degreaser as itemised below?  
 Length: 4'-0"  
 Width: 2'-8"  
 Height: 5'-0"  
 Freeboard Height: 1'-7" An increase to 2'-0" is planned.
4. Is the degreaser equipped with an agitator? No
5. Is there a visible high level liquid mark? Yes
6. Is the degreaser equipped with a drain rack? The basket carrier acts as drain rack.
7. What is the temperature (in °F) of the liquid? 165
8. Is there a thermostat to control the temperature of the liquid? Yes
9. Is it equipped with a condenser (referred to as primary coils or water jacket in the sketch) ? Yes
10. If the answer for item 9 is 'yes', what is the cooling area of the condenser?
11. Is the degreaser equipped with spray nozzles? No
12. If the answer for item 11 is 'yes', what is the pressure at the nozzles?
13. Is the degreaser equipped with a freeboard chiller? One is planned.
14. What is the coolant used in the chiller? 30% Ethyl 10E Glycol
15. What is the temperature of the coolant? 33 degrees-38 degrees F is planned.
16. Is the degreaser free from the influence of a local exhaust system (hood, lip exhaust etc.) located within 36 inches from the emission points of the degreaser? Yes, present exhaust is to be eliminated.
17. Is the degreaser free from the influence of a positive pressure source (fan etc.) located within 20 feet of the tank rim? Yes
18. If the answer for items 16 & 17 is 'no', do the emissions pass thro' any kind of control device? If so, please give details about the contr device as per the attached sheet.

845990057



NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTSource Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E				
SOURCE INFORMATION				
1. Source Description <u>1 - Semi-automatic Open Top Degreaser Metal Wash Model N2-48-S</u>				
2. Operating Schedule <u>Intermittent 8</u> <u>2400</u> <u>1958</u>				
Hours/Day Hours/Year Operation Starting Date				
3. % Annual Production Throughput <u>26</u> <u>26</u> <u>24</u> <u>24</u>				
By Quarter Jan.-Mar. Apr.-June July-Sept. Oct.-Dec.				
4. Volume Of Gas Discharged From This Source (ACFM) <u>950</u> Source Discharge Temperature ( $^{\circ}$ F) <u>100</u>				
SECTION F				
CONTROL APPARATUS ON SOURCE				
Primary		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Source Connected
Secondary				
Tertiary				
SECTION G				
AIR CONTAMINANTS FROM SOURCE				
CONTAMINANT NAME		Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethane 1.1.1.		<u>9.0</u>	<u>4.8</u>	<u>Estimated</u>

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME &amp; DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) N1 Udylite Exhaust

(over)

845990059

SECTION H

### A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description Machined parts are degreased in a basket that activates a piston that lowers work and basket into the degreaser.

2. Total Amount ☒ Batch 100 (Ave.) lb/batch, .12 hr/batch  
Materials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethane	1.5		
Steel Parts	98.5		

### B. FUEL BURNING EQUIPMENT

1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_  
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

#### PRIMARY FUEL

#### SECONDARY FUEL

3. a. Type of Fuel: \_\_\_\_\_  
b. Heating Value (Btu/lb): \_\_\_\_\_  
4. Method of Firing: \_\_\_\_\_  
5. % Sulfur in Fuel (Dry): \_\_\_\_\_  
6. % Ash Content of Fuel (Dry): \_\_\_\_\_  
7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons) Liquid Fuel ( $10^3$  Gal.) Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)

### C. INCINERATION

1. Type of Unit \_\_\_\_\_  
2. Constituents of Waste (s) \_\_\_\_\_  
3. Waste Code ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6  
4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

### D. STORAGE FACILITY

1. Tank Contents \_\_\_\_\_  
2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_  
3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
\_\_\_\_\_ ( $10^3$  Gal.) ☐

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_  
5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_  
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)  
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No  
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)  
Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_, Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

For Department Use Only

□ □ □ □ □ - □ □ □ □ - □ □ □ □



BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E	<b>SOURCE INFORMATION</b>			
	1. Source Description <u>1 - Electro Cleaner Tank (Designated A)</u>			
	2. Operating Schedule			
	<u>8</u> Hours/Day	<u>1600</u> Hours/Year	<u>1960</u> Operation Starting Date	
	3. % Annual Production Throughput By Quarter			
	<u>30</u> Jan.-Mar.	<u>20</u> Apr.-June	<u>20</u> July-Sept.	<u>30</u> Oct.-Dec.
	4. Volume Of Gas Discharged From This Source (ACFM) <u>1350</u>		Source Discharge Temperature ( <sup>o</sup> F) <u>180</u>	
SECTION F	<b>CONTROL APPARATUS ON SOURCE</b>			
	Primary	Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
	Secondary			
	Tertiary			
SECTION G	<b>AIR CONTAMINANTS FROM SOURCE</b>			
	CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
	Matawan 48W (Sodium Hydroxide)	0.00563		Estimated

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric Corporation

Company Designation of Stack (s) N1 Udyllite Exhaust

(over)

845990061



**A. MANUFACTURING AND MATERIALS HANDLING**1. Process Description Clean Steel Parts2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batchMaterials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials % By Wt. Raw Materials % By Wt.

Matawan 48W

1

Steel

99

**B. FUEL BURNING EQUIPMENT**1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

PRIMARY FUEL

SECONDARY FUEL

3. a. Type of Fuel: \_\_\_\_\_

b. Heating Value (Btu/lb): \_\_\_\_\_

4. Method of Firing: \_\_\_\_\_

5. % Sulfur in Fuel (Dry): \_\_\_\_\_

6. % Ash Content of Fuel (Dry): \_\_\_\_\_

7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons)

Liquid Fuel ( $10^3$  Gal.)Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)**C. INCINERATION**

1. Type of Unit \_\_\_\_\_

2. Constituents of Waste (s) \_\_\_\_\_

3. Waste Code ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

**D. STORAGE FACILITY**

1. Tank Contents \_\_\_\_\_

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
( $10^3$  Gal.) ☐

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_, Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

SECTION H

For Department Use Only

□ □ □ □ □ . □ □ □ □ □

845990062

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E	<b>SOURCE INFORMATION</b>			
	1. Source Description <u>1 - Hydrochloric Acid Tank (Designated C)</u>			
	2. Operating Schedule	<u>8</u> Hours/Day	<u>1600</u> Hours/Year	<u>1960</u> Operation Starting Date
	3. % Annual Production Throughput By Quarter	<u>30</u> Jan.-Mar.	<u>20</u> Apr.-June	<u>20</u> July-Sept.
SECTION F	4. Volume Of Gas Discharged From This Source (ACFM) <u>850</u>			
	Source Discharge Temperature (°F) <u>Ambient</u>			
	<b>CONTROL APPARATUS ON SOURCE</b>			
	Primary	Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
SECTION G	Secondary			
	Tertiary			
	<b>AIR CONTAMINANTS FROM SOURCE</b>			
	CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
	Hydrochloric Acid	<u>0.17395</u>		<u>Estimated</u>

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric Corporation

Company Designation of Stack (s) N1 Udylyte Exhaust

845990063

(over)

**A. MANUFACTURING AND MATERIALS HANDLING**1. Process Description Remove Rust and Oxides From Steel2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batch  
Materials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Hydrochloric Acid	10		
Steel Parts	90		

**B. FUEL BURNING EQUIPMENT**1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_  
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine**PRIMARY FUEL****SECONDARY FUEL**

3. a. Type of Fuel: \_\_\_\_\_  
b. Heating Value (Btu/lb): \_\_\_\_\_  
4. Method of Firing: \_\_\_\_\_  
5. % Sulfur in Fuel (Dry): \_\_\_\_\_  
6. % Ash Content of Fuel (Dry): \_\_\_\_\_  
7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons)

Liquid Fuel ( $10^3$  Gal.)Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)**C. INCINERATION**

1. Type of Unit \_\_\_\_\_  
2. Constituents of Waste (s) \_\_\_\_\_  
3. Waste Code ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6  
4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

**D. STORAGE FACILITY**

1. Tank Contents \_\_\_\_\_  
2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_  
3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
\_\_\_\_\_ ( $10^3$  Gal.) ☐

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_  
5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_  
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)  
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No  
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)  
Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_, Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

For Department Use Only

□ □ □ □ □ - □ □ □ □ - □ □ □ □

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTSource Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E				
SOURCE INFORMATION				
1. Source Description <u>1 - Electro Cleaner Tank (Designated E)</u>				
2. Operating Schedule				
<div><div><u>8</u> Hours/Day</div><div><u>1600</u> Hours/Year</div><div><u>1960</u> Operation Starting Date</div></div>				
3. % Annual Production Throughput By Quarter				
<div><div><u>30</u> Jan.-Mar.</div><div><u>20</u> Apr.-June</div><div><u>20</u> July-Sept.</div><div><u>30</u> Oct.-Dec.</div></div>				
4. Volume Of Gas Discharged From This Source (ACFM) <u>2050</u>				
Source Discharge Temperature (°F) <u>180</u>				
SECTION F				
CONTROL APPARATUS ON SOURCE				
<div><div>Primary</div><div>Capital Cost (Dollars)</div><div>Annual Operating Cost (Dollars)</div><div>No. of Sources Connected</div></div>				
<div><div>Secondary</div><div></div><div></div><div></div></div>				
<div><div>Tertiary</div><div></div><div></div><div></div></div>				
SECTION G				
AIR CONTAMINANTS FROM SOURCE				
<div><div>CONTAMINANT NAME</div><div>Emissions w/o Control (lbs./hr.)</div><div>Emissions with Control (lbs./hr.)</div><div>How Determined</div></div>				
<div><div>Matawan 48W (Sodium Hydroxide)</div><div><u>0.01125</u></div><div></div><div><u>Estimated</u></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric Corporation  
Company Designation of Stack (s) N1 Udylite Exhaust

(over)

845990065

**A. MANUFACTURING AND MATERIALS HANDLING**1. Process Description To Clean Steel Parts2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batch  
Materials Processed ☒ Continuous 180 Ave. \_\_\_\_\_ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Matawan 48W	.7		
Steel Parts	99.3		

**B. FUEL BURNING EQUIPMENT**1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine**PRIMARY FUEL****SECONDARY FUEL**

3. a. Type of Fuel: \_\_\_\_\_

b. Heating Value (Btu/lb): \_\_\_\_\_

4. Method of Firing: \_\_\_\_\_

5. % Sulfur in Fuel (Dry): \_\_\_\_\_

6. % Ash Content of Fuel (Dry): \_\_\_\_\_

7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons)

Liquid Fuel ( $10^3$  Gal.)Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)**C. INCINERATION**

1. Type of Unit \_\_\_\_\_

2. Constituents of Waste (s) \_\_\_\_\_

3. Waste Code ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

**D. STORAGE FACILITY**

1. Tank Contents \_\_\_\_\_

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
( $10^3$  Gal.) ☐**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_, Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

For Department Use Only

					·					·				
--	--	--	--	--	---	--	--	--	--	---	--	--	--	--

845990066

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTSource Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E				
SOURCE INFORMATION				
1. Source Description <u>1 - Hydrochloric Acid Tank (Designated G)</u>				
2. Operating Schedule				
<div><div>8</div><div>Hours/Day</div><div>1600</div><div>Hours/Year</div><div>1960</div><div>Operation Starting Date</div></div>				
3. % Annual Production Throughput By Quarter				
<div><div>30</div><div>Jan.-Mar.</div><div>20</div><div>Apr.-June</div><div>20</div><div>July-Sept.</div><div>30</div><div>Oct.-Dec.</div></div>				
4. Volume Of Gas Discharged From This Source (ACFM) <u>300</u>				
Source Discharge Temperature ( $^{\circ}$ F) <u>Ambient</u>				
SECTION F				
CONTROL APPARATUS ON SOURCE				
<div><div>Primary</div><div>Capital Cost (Dollars)</div><div>Annual Operating Cost (Dollars)</div><div>No. of Sources Connected</div></div>				
<div><div>Secondary</div><div></div><div></div><div></div></div>				
<div><div>Tertiary</div><div></div><div></div><div></div></div>				
SECTION G				
AIR CONTAMINANTS FROM SOURCE				
<div><div>CONTAMINANT NAME</div><div>Emissions w/o Control (lbs./hr.)</div><div>Emissions with Control (lbs./hr.)</div><div>How Determined</div></div>				
<div><div>Hydrochloric Acid</div><div>0.01739</div><div></div><div>Estimated</div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				
<div><div></div><div></div><div></div><div></div></div>				

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) N1 Udylite Exhaust

(over)

845990067

۵۱۵۵

## 1. Process Description

\*This material taken from tank (C) when new additions made to tank (C)

1. Gross Heat Input ( $10^6$  BTU/HR)

2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

## SECONDARY FUEL

7. Amount Burned/Yr. \_\_\_\_\_

Units:	Solid Fuel (Tons)	Liquid Fuel ( $10^3$ Gal.)	Gaseous Fuel ( $10^6$ Ft. <sup>3</sup> )
--------	-------------------	----------------------------	--

1. Type of Unit \_\_\_\_\_

3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6

4. Amount Reported (kg/ha)  \_\_\_\_\_

5. Amount Reported (kg/ha)  \_\_\_\_\_

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

### 1. Tank Contents

3. Capacity  $(10^3 \text{ Ft}^3)$  ☐ Equivalent or Actual Diameter (Ft.)

3. Capacity \_\_\_\_\_ (10<sup>3</sup> Ft.<sup>3</sup>) \_\_\_\_\_  
 (10<sup>3</sup> Gal.) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_

7. Color of Tank ☐ White ☐ Other Exposed to Sun's Rays ☐ Yes ☐ No

### 8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_ Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

**For Department Use Only**

--	--	--	--	--	--	--	--	--	--	--

**845990068**

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

## Source Emissions And Source Data Form

(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E				
SOURCE INFORMATION				
1. Source Description <u>1 - Electro Cyanide Tank (Designated I)</u>				
2. Operating Schedule				
<div><div><u>8</u> Hours/Day</div><div><u>1600</u> Hours/Year</div><div><u>1960</u> Operation Starting Date</div></div>				
3. % Annual Production Throughput By Quarter				
<div><div><u>30</u> Jan.-Mar.</div><div><u>20</u> Apr.-June</div><div><u>20</u> July-Sept.</div><div><u>30</u> Oct.-Dec.</div></div>				
4. Volume Of Gas Discharged From This Source (ACFM) <u>350</u>				
Source Discharge Temperature ( $^{\circ}$ F) <u>Ambient</u>				
SECTION F				
CONTROL APPARATUS ON SOURCE				
<div><div>Primary</div><div>Capital Cost (Dollars)</div><div>Annual Operating Cost (Dollars)</div><div>No. of Sources Connected</div></div>				
<div><div>Secondary</div><div></div><div></div><div></div></div>				
<div><div>Tertiary</div><div></div><div></div><div></div></div>				
SECTION G				
AIR CONTAMINANTS FROM SOURCE				
CONTAMINANT NAME				
Emissions w/o Control (lbs./hr.)				
Emissions with Control (lbs./hr.)				
How Determined				
<div><div>Sodium Cyanide</div><div>0.003125</div><div></div><div>Estimated</div></div>				
<div><div>Sodium Hydroxide</div><div>0.00125</div><div></div><div>"</div></div>				

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) N1 Udylite Exhaust

(over)

845990069



## A. MANUFACTURING AND MATERIALS HANDLING

### 1. Process Description Remove Carbon Smut Prior to Plating

2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batch

Materials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Sodium Cyanide	0.3		
Sodium Hydroxide	0.1		
Steel Parts	99.6		

## B. FUEL BURNING EQUIPMENT

**1. Gross Heat Input ( $10^6$  BTU/HR)**

2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

**PRIMARY FUEL**

## SECONDARY FUEL

3. a. Type of Fuel: \_\_\_\_\_

b. Heating Value (Btu/lb): \_\_\_\_\_

4. Method of Firing: \_\_\_\_\_

5. % Sulfur in Fuel (Dry): \_\_\_\_\_

6. % Ash Content of Fuel (Dry): \_\_\_\_\_

7. Amount Burned/Yr. \_\_\_\_\_

Units:	Solid Fuel (Tons)	Liquid Fuel ( $10^3$ Gal.)	Gaseous Fuel ( $10^6$ Ft. <sup>3</sup> )
--------	-------------------	----------------------------	--

### C. INCINERATION

1. Type of Unit \_\_\_\_\_

2. Constituents of Waste (s) \_\_\_\_\_

3. Waste Code      ☐ 0      ☐ 1      ☐ 2      ☐ 3      ☐ 4      ☐ 5      ☐ 6

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

#### **D. STORAGE FACILITY**

### 1. Tank Contents

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
   ( $10^3$  Gal.) ☐

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_

6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)

7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

### 8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_ Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

**For Department Use Only**

					•				•			
--	--	--	--	--	---	--	--	--	---	--	--	--

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

## Source Emissions And Source Data Form

(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E				
<b>SOURCE INFORMATION</b>				
1. Source Description <u>1 - Zinc Plating Tank (Designated J)</u>				
2. Operating Schedule				
<u>8</u> Hours/Day		<u>1600</u> Hours/Year	<u>1960</u> Operation Starting Date	
3. % Annual Production Throughput By Quarter				
<u>30</u> Jan.-Mar.		<u>20</u> Apr.-June	<u>20</u> July-Sept.	<u>30</u> Oct.-Dec.
4. Volume Of Gas Discharged From This Source (ACFM) <u>4550</u>				
Source Discharge Temperature ( $^{\circ}$ F) <u>Ambient</u>				
SECTION F				
<b>CONTROL APPARATUS ON SOURCE</b>				
Primary		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Secondary				
Tertiary				
SECTION G				
<b>AIR CONTAMINANTS FROM SOURCE</b>				
CONTAMINANT NAME		Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Sodium Cyanide		<u>0.0075</u>		<u>Estimated</u>
Sodium Hydroxide		<u>0.0050</u>		<u>"</u>

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) N1 Udylite Exhaust

845990071

(over)

# **A. MANUFACTURING AND MATERIALS HANDLING**

1. Process Description Plate Zinc on Steel

2. Total Amount	<input type="checkbox"/> Batch _____ lb/batch, _____ hr/batch
Materials Processed	<input checked="" type="checkbox"/> Continuous <u>180</u> Ave. _____ lb/hr
3. Raw Materials	% By Wt. Raw Materials % By Wt.
Sodium Cyanide	<u>0.6</u>
Sodium Hydroxide	<u>0.3</u>
Steel Parts	<u>99.1</u>

## **B. FUEL BURNING EQUIPMENT**

1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_

2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

PRIMARY FUEL SECONDARY FUEL

3. a. Type of Fuel: \_\_\_\_\_

b. Heating Value (Btu/lb): \_\_\_\_\_

4. Method of Firing: \_\_\_\_\_

5. % Sulfur in Fuel (Dry): \_\_\_\_\_

6. % Ash Content of Fuel (Dry): \_\_\_\_\_

7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons) Liquid Fuel ( $10^3$  Gal.) Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)

## **C. INCINERATION**

1. Type of Unit \_\_\_\_\_

2. Constituents of Waste (s) \_\_\_\_\_

3. Waste Code ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

## **D. STORAGE FACILITY**

1. Tank Contents \_\_\_\_\_

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_

( $10^3$  Gal.) ☐

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_

6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)

7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_, Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

For Department Use Only

☐ ☐ ☐ ☐ ☐ - ☐ ☐ ☐ ☐ ☐

845990072

## A. MANUFACTURING AND MATERIALS HANDLING

### 1. Process Description Put Phosphate Coating on Steel

2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batch

Materials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials	% By Wt.
1. 100% Virgin Polypropylene	100%

## Raw Materials

**% By Wt.**

<u>Bonderite D180</u>	<u>0.6</u>
-----------------------	------------

Steel Parts	99.4
-------------	------

## B. FUEL BURNING EQUIPMENT

**1. Gross Heat Input ( $10^6$  BTU/HR)**

## 2. Type Heat Exchange

☐ **Direct**☐ Indirect☐ Internal Combustion Engine

**PRIMARY FUEL**

## SECONDARY FUEL

3. a. Type of Fuel: \_\_\_\_\_

b. Heating Value (Btu/lb): \_\_\_\_\_

4. Method of Firing: \_\_\_\_\_

5. % Sulfur in Fuel (Dry): \_\_\_\_\_

6. % Ash Content of Fuel (Dry): \_\_\_\_\_

7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons)

Liquid Fuel ( $10^3$  Gal.)

**Gaseous Fuel ( $10^6 \text{ Ft.}^3$ )**

### C. INCINERATION

1. Type of Unit \_\_\_\_\_

2. Constituents of Waste (s) \_\_\_\_\_

3. Waste Code      ☐ 0      ☐ 1      ☐ 2      ☐ 3      ☐ 4      ☐ 5      ☐ 6

4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

#### D. STORAGE FACILITY

**1. Tank Contents** \_\_\_\_\_

2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_

3. Capacity \_\_\_\_\_ ( $10^3 \text{ Ft.}^3$ ) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
   ( $10^3 \text{ Gal.}$ ) ☐

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_

5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_

6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)

7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

### 8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_ Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

**For Department Use Only**

--	--	--	--	--

NEW JERSEY STATE DEPARTMENT



OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENTSource Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E																																								
SOURCE INFORMATION																																								
1. Source Description <u>1 - Phosphating Tank (Designated N)</u>																																								
2. Operating Schedule																																								
<table border="0"><tr><td><u>8</u></td><td><u>1600</u></td><td colspan="2"><u>1960</u></td></tr><tr><td>Hours/Day</td><td>Hours/Year</td><td colspan="2">Operation Starting Date</td></tr></table>					<u>8</u>	<u>1600</u>	<u>1960</u>		Hours/Day	Hours/Year	Operation Starting Date																													
<u>8</u>	<u>1600</u>	<u>1960</u>																																						
Hours/Day	Hours/Year	Operation Starting Date																																						
3. % Annual Production Throughput By Quarter																																								
<table border="0"><tr><td><u>30</u></td><td><u>20</u></td><td><u>20</u></td><td><u>30</u></td></tr><tr><td>Jan.-Mar.</td><td>Apr.-June</td><td>July-Sept.</td><td>Oct.-Dec.</td></tr></table>					<u>30</u>	<u>20</u>	<u>20</u>	<u>30</u>	Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.																												
<u>30</u>	<u>20</u>	<u>20</u>	<u>30</u>																																					
Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.																																					
4. Volume Of Gas Discharged From This Source (ACFM) <u>2200</u>																																								
Source Discharge Temperature ( $^{\circ}$ F) <u>170</u>																																								
SECTION F																																								
CONTROL APPARATUS ON SOURCE																																								
<table border="0"><tr><td></td><td>Capital Cost (Dollars)</td><td>Annual Operating Cost (Dollars)</td><td>No. of Sources Connected</td></tr><tr><td>Primary</td><td></td><td></td><td></td></tr><tr><td>Secondary</td><td></td><td></td><td></td></tr><tr><td>Tertiary</td><td></td><td></td><td></td></tr></table>						Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected	Primary				Secondary				Tertiary																							
	Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected																																					
Primary																																								
Secondary																																								
Tertiary																																								
SECTION G																																								
AIR CONTAMINANTS FROM SOURCE																																								
<table border="0"><tr><td>CONTAMINANT NAME</td><td>Emissions w/o Control (lbs./hr.)</td><td>Emissions with Control (lbs./hr.)</td><td>How Determined</td></tr><tr><td><u>Bonderite D180 (5% Phosphoric Acid)</u></td><td><u>0.02381</u></td><td></td><td><u>Estimated</u></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>					CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined	<u>Bonderite D180 (5% Phosphoric Acid)</u>	<u>0.02381</u>		<u>Estimated</u>																												
CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined																																					
<u>Bonderite D180 (5% Phosphoric Acid)</u>	<u>0.02381</u>		<u>Estimated</u>																																					

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric CorporationCompany Designation of Stack (s) N1 Udylite Exhaust

845990074

(over)

SECTION H

**A. MANUFACTURING AND MATERIALS HANDLING**

1. Process Description Neutralize Phosphate Chemicals

2. Total Amount ☐ Batch \_\_\_\_\_ lb/batch, \_\_\_\_\_ hr/batch  
Materials Processed ☒ Continuous 180 Ave. lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Chromium Trioxide	0.01		
Phosphoric Acid	0.02		
Steel Parts	99.97		

**B. FUEL BURNING EQUIPMENT**

1. Gross Heat Input ( $10^6$  BTU/HR) \_\_\_\_\_  
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

**PRIMARY FUEL**

**SECONDARY FUEL**

3. a. Type of Fuel: \_\_\_\_\_  
b. Heating Value (Btu/lb): \_\_\_\_\_  
4. Method of Firing: \_\_\_\_\_  
5. % Sulfur in Fuel (Dry): \_\_\_\_\_  
6. % Ash Content of Fuel (Dry): \_\_\_\_\_  
7. Amount Burned/Yr. \_\_\_\_\_

Units: Solid Fuel (Tons) Liquid Fuel ( $10^3$  Gal.) Gaseous Fuel ( $10^6$  Ft.<sup>3</sup>)

**C. INCINERATION**

1. Type of Unit \_\_\_\_\_  
2. Constituents of Waste (s) \_\_\_\_\_  
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6  
4. Amount Burned (lbs./hr.) \_\_\_\_\_ Type of Auxil. Fuel (If Any) \_\_\_\_\_

**D. STORAGE FACILITY**

1. Tank Contents \_\_\_\_\_  
2. Type of Tank or Bin \_\_\_\_\_ Height or Length (Ft.) \_\_\_\_\_  
3. Capacity \_\_\_\_\_ ( $10^3$  Ft.<sup>3</sup>) ☐ Equivalent or Actual Diameter (Ft.) \_\_\_\_\_  
\_\_\_\_\_ ( $10^3$  Gal.) ☐

**THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE**

4. Vapor Pressure at 70°F (PSIA) \_\_\_\_\_ Storage Temp. If Not Ambient (°F) \_\_\_\_\_  
5. Filling Rate (Gal/Min) \_\_\_\_\_ Annual Throughput ( $10^3$  Gal/Yr) \_\_\_\_\_  
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)  
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No  
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)  
Type \_\_\_\_\_, Thickness (Inches) \_\_\_\_\_ Thermal Conductivity (BTU/HR/FT<sup>2</sup>/°F) \_\_\_\_\_

For Department Use Only

□ □ □ □ □ - □ □ □ □ - □ □ □ □

845990075



BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR  
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT  
AND  
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form  
(Complete this form for each source and submit  
with application Form VEM-003)

SECTION E	<b>SOURCE INFORMATION</b>			
	1. Source Description <u>1 - Chromic Acid Rinse (Designated P)</u>			
	2. Operating Schedule			
	<u>8</u> Hours/Day	<u>1600</u> Hours/Year	<u>1960</u> Operation Starting Date	
	3. % Annual Production Throughput By Quarter			
	<u>30</u> Jan.-Mar.	<u>20</u> Apr.-June	<u>20</u> July-Sept.	<u>30</u> Oct.-Dec.
	4. Volume Of Gas Discharged From This Source (ACFM) <u>350</u>			
	Source Discharge Temperature (°F) <u>180</u>			
SECTION F	<b>CONTROL APPARATUS ON SOURCE</b>			
	Primary _____	Capital Cost (Dollars) _____	Annual Operating Cost (Dollars) _____	No. of Sources Connected _____
	Secondary _____	_____	_____	_____
	Tertiary _____	_____	_____	_____
SECTION G	<b>AIR CONTAMINANTS FROM SOURCE</b>			
	CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
	Chromium Trioxide	<u>0.00022</u>	_____	<u>Estimated</u>
	Phosphoric Acid	<u>0.00031</u>	_____	"
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name Westinghouse Electric Corporation  
Company Designation of Stack (s) N1 Udylite Exhaust

(over)

845990076

# Manufacturing Process

Plating Room Still Line

Production - Various Parts

Chemicals Used (by steps above)		Quantity	Concentration	Disposal		
				By percentage:	3 columns must total 100%	
				Hauled away	Flush	Consumed
Cleaner (STL)	Clepo 43R	30 Lb.+ 10 Lb.	10 Oz/Gal	0	100	0
Cleaner (Brass)	Clepo 136R	10 Lb.+ 5 Lb.	8 Oz/Gal	0	100	0
Acid	Hydrochloric	75 Gal.	Concentrated	0	50	50
Anodic Cyanide	Sodium Cyanide	1.5 Lb.	2 Oz/Gal	0	80	20
	Sodium Hydroxide	7.5 Lb.	7 Oz/Gal			
Acid(Brt.Dip)	Sulfuric Acid	25 Gal.	2 Vol.(67%)	0	40	60
	Nitric Acid	50 Gal.	1 Vol.(33%)			
Cyanide Soak	Nacn	5 Lb.	6 Oz/Gal.	0	40	60
Bright Alloy Plate	Sodium Cyanide	15 Lb.	3 Oz/Gal.	0	30	70
	Sodium Hydroxide	2 Lb.	0.5 Oz/Gal			
	Sodium Stannate	2 Lb.	0.2 Oz/Gal			
Nickel Plate	Nickel Sulphate	36 Lb.	40 Oz/Gal	0	2	98
	" Chloride	12 Lb.	12 Oz/Gal			
	Boric Acid	6 Lb.	6.5 Oz/Gal			
Zinc Plate	Sodium Hydrox	16 Lb.	10 Oz/Gal	0	2	98
	Sodium CN	6 Lb.	10 Oz/Gal			
	Zinc CN	--	4 Oz/Gal			
Copper Plate	Sodium Cyanide	6 Lb.	0.7 Oz./Gal	0	2	98
	Sodium Hydroxide	4 Lb.				
Tin Plate	Sodium Hydroxide	10 Oz.	2 Oz/Gal	0	2	98
	" Acetate	1 Lb.	3 Oz/Gal			
	" Stannate	10 Lb.	14 Oz/Gal			

845990077

Section 1 last



# Manufacturing Process

Plating Room

Still Line

## Production - Various Parts

Chemicals Used (by steps above)	Quantity	Concentration	Disposal By percentage: 3 columns must total 100%		
			Hauled away	Flush	Consumed
Caustic Etch	Sodium Hydroxide 8 Lb.	6 Oz/Gal	0	5	95
Paint Strip	Clepo 5 GP 20 Lb.	1 Lb/Gal	0	5	95
Oxidize Copper	Ebanol "C" Spec 10 Lb.	1.5 Lb/Gal	0	5	95
Water Dip Lac.	Iralac 1/2 Gal.	33%	0	0	100
Fluoboric Acid Crocks	Hydrogen Peroxide 10 Gal.	14%	0	5	95
	Fluoboric Acid 20 Gal.	28.6 %			
Bonderize	Bonderite D-180 1/2 Gal.	55 Lb/100 G	0	5	95
Chromate Alum.	Iridite 14-2 6 Oz.	1 Oz/Gal	0	5	95
Chromate Zinc	Iridite 8-P 3 Oz.	1 Oz/Gal	0	5	95
Deoxidize	Clepo 180K 10 Lb.	1 Lb/Gal	0	5	95

# Manufacturing Process

## Plating Room

### Production-Cases, Covers, Various Parts

Chemicals Used (by steps above)		Quantity	Concentration	Disposal 3 columns must total 100%		
				By percentage: Hauled away	Flush	Consumed
Cleaner STL.	Matawan 48W	75 Lb.	10 Oz/Gal.	0	100	0
Acid	Hydrochloric	75 Gal.	7 Normal	0	50	50
Cleaner ST	Matawan 48W	50 Lb.	10 Oz/Gal.	0	100	0
Acid	Hydrochloric	0	5 Normal	0	50	50
Electro CYN	NaCn	25	7.8 Oz/Gal	0	100	0
	NaOh	10	2			
Zinc Plate	Sod. Cyanide	40	10 Oz/Gal	0	5	95
	Sod. Hydroxide	20	10 Oz/Gal			
	Zinc Cyanide	60	4 Oz Zn/Gal.			
Pre Dip	Parcoleme Z	12 LB.	1 Oz/Gal	0	95	5
Bonderzie	Bonderite 180	7.5 Gal.	55 Lb./100 Gal	0	5	95
Chromic Rinse	Chromic Acid	79 g	79 g	0	95	5
	Phosphoric Acid	66 ML	66 ML			

845990079

# Manufacturing Process

## Plating Room Barrel Line

### Production - Various Parts

Chemicals Used (by Steps Above)	Quantity	Concentration	Disposal		
			By percentage:	3 columns must total 100%	
			Hauled away	Flush	Consumed
Cleaner (Brass)	Clepo 136R 25 Lb. + 7 Lb.	8 Oz/Gal	0	100%	0%
Cleaner (Steel)	Clepo 43R 45 Lb. + 10 Lb.	10 Oz/Gal	0	100	0
Acid (H <sub>3</sub> Po <sub>4</sub> )	Phosphoric Acid 5 Gal.	Concentrated	0	50	50
Acid (HCL)	Hydrochloric Acid 10 Gal.	Concentrated	0	50	50
Acid(Phos-Nitric)	(Phosphoric 5 Gal )	48%	0	50	50
	(Nitric 20 Gal )	18%			
Anodic Cyanide	(Sod.Hydroxide 25 Lb. )	2 Oz/Gal	0	80	20
	(Sod.Cyanide 10 Lb. )	7 Oz/Gal			
Bonderize	Bonderite D-180 37.5 Lb.	55 Lb/100 Gal.	0	10	90
Pre Dip	Parcolene Z 11 Lb.	1 Oz/Gal.	0	95	5
Bonderize	Bonderite D-180 37.5 Lb.	55 Lb/100 Gal.	0	10	90
Chromic Rinses	(Phosphoric Acid 138 ML	69 ML/175 Gal.)	0	95	5
	(Chromic Acid 164g	82 g/175 Gal.)			
Copper Plate	Sodium Hydroxide 1 Lb.)		0	2	98
	Sodium Cyanide 2 Lb.)	0.7 Oz/Gal			
Black Oxide (CU)	Ebanol "C" Spec 10 Lb.	1.5 Lb/Gal	0	2	98
Bright Alloy Plate	Sodium Cyanide 7.5 Lb.)	3.0 Oz/Gal	0	30	70
	Sodium Stannate 1 Lb. )	0.22 Oz/Gal			
Zinc Plate	Sodium Cyanide 15 Lb. )	10 Oz/Gal	0	2	98
	Sodium Hydroxide 15 Lb. )	10 Oz/Gal			
Nickel Plate	Nickel Sulphate 40	40 Oz/Gal			
	" Chloride 20	15 Oz/Gal	0	2	98
	Boric Acid 10	6 Oz/Gal			
	Brightener				
Tin Plate	Sodium Hydroxide 1 Lb. )	2 Oz/Gal.			
	Sodium Acetate 1 Lb. )	3 Oz/Gal	0	2	98
	Sodium Stannate 10 Lb. )	14 Oz/Gal.			

845990080

# Manufacturing Process

P.C. Bd.

Production 750 Bds/Week

## P.C. Area

Chemicals Used (by steps above)		Quantity	Concentration	by percentage:	Disposal 3 columns must total 100%	
				Hauled away	Flush	Consumed
Ferric Chloride Rinse	Ferric Chloride	0	38° Be	99	1%	0
Caustic (10%)	Sodium Hydroxide	3 Lb	10%	-0	10	90
Oxalic Acid to clean etcher every 6 weeks	Oxalic Acid	--	2.5 Oz/Gal	0	100	0

845990081

Manufacturing Process

Water Wash Spray Booths

Production - Various Parts

P.C. Area

Chemicals Used (by steps above)		Quantity	Concentration	by percentage:	Disposal 3 columns must total 100%	
				Hauled away	Flush	Consumed
N-1 Paint Booth	Oakite 244	45 Lb.	.03 lbs/Gal	0	100	0
R-1 Paint Booth	Oakite 244	80 Lbs.	.03 lbs/Gal	0	100	0

845990082

II Air Survey Section H

Complaints from Public

December 18, 1970 complaint from residents of Colonnade Apartments, North of Plant relative to our soot blowing during night hours. Met with individual involved, discussed problem and assured him action would be taken. Installed equipment to indicate wind direction and restricted soot blowing to hours when wind was in favorable direction. Received very favorable reaction from community.

Other steps taken to insure compliance was installation of sensitive smoke detection equipment with 8 hour recording charts. Expect no future difficulty.



## Westinghouse Electric Corporation

Process Specification NE 294961-1

Issued: January 27, 1964  
1st Rev.: February 17, 1964

### OIL AND METAL CHIP REMOVAL

#### GENERAL:

This process employs an emulsifiable solvent cleaner to remove heavy oil films, solid dirt, and loose metallic chips from all types of metals. The oil is emulsified in water permitting chips and dirt to separate from the work.

SAFETY REQUIREMENTS: See Safe Practice Data Sheets C-6, K-2, S-6

#### 1. LOADING:

- 1.1 Place parts which may be tumbled, without danger of damaging critical dimensions, into a barrel cylinder with perforations which will retain the work and permit chips and dirt to fall through.
- 1.2 Parts which should not be tumbled may be handled in suitable perforated baskets.

#### 2. CLEANING:

- 2.1 Rotate the barrel for 2 minutes in the solution to permit penetration into blind holes.
- 2.2 Soak parts with blind holes which are done in a basket for 2 minutes. Agitate gently every 30 seconds to free chips and displace entrapped air.
- 2.3 Drain excess cleaning solution from the barrel or the basket before transfer to the water rinse.

NOTE: Keep water, wet baskets or wet parts out of the cleaning solution or it will reduce the effectiveness of the cleaner.

#### FORMULA

Emulsion Cleaner 53516EE00A	3.5 gal (SFDS C-6)
Solvent 55812CB00A (1609-2)	31.5 gal (SFDS S-6)

#### 3. RINSING:

- 3.1 Tumble in clean running water for 3 to 5 minutes to emulsify the oil and float off the chips.
- 3.2 Basket work should be rinsed for the same time and agitated gently to free the chips.

#### 4. DRYING:

- 4.1 Drain excess water and blow dry with air.
- 4.2 After cleaning, dip steel parts in a mixture of 5 parts of kerosene 55113AA00A (SFDS K-2) and 1 part of oil 55121AD00A to prevent rusting prior to plating.

NE 294961-1

845990084

4/24/88,

Re: Crock Emulsion Cleaner 294961 (53516 EE)

(1) 18" Diam x 27" deep with 25" hole level

(a) Surface Area =  $0.785(D^2) = 0.785(15^2) = \underline{1.76 \text{ ft}^2}$

(b) Volume =  $\frac{8748 \text{ in}^3}{241 \text{ in}^3/\text{gal}} = \underline{36.2 \text{ gal}}$

(2) ~~1~~ Solution Makeup:-

3 1/2 gal 53516 EE 00A Emulsion Cleaner  
\* 31 1/2 gal 55812C B00A Mineral Spirit

\* Solvent, n.p.s. Combustible Liquid Flash Pt 38C (100°F)

(3) Cleaning Procedure: DRY Parts Only

(a) Dip in the solution for 30-60 seconds

(b) Shake and agitate to insure all surfaces are wetted.

(c) Remove & drain

(d) Water rinse to remove oil, chips, etc

(e) Place in soak or electro cleaner and proceed with the standard cleaning.

Note: Do not go into this bath with parts wet with water.

For Aluminum  
Steel  
Brass

WTF  
8-18-88



By June 1, 1980, a completed application for a "Permit to Alter Control Apparatus or Equipment" which demonstrates compliance with subsections (c), (d), and (e) of this Section shall be achieved.

2. By March 1, 1981, construction of equipment in accordance with an approved "Permit to Construct, Install, or Alter" shall commence.

ted from  
walls

3. By August 1, 1981, compliance with the requirements shall be achieved.

(j) Any person responsible for a source operation not located in Atlantic, Cape May, Cumberland, Hunterdon, Ocean, Sussex, or Warren shall comply with the provisions of subsections (c), (d), and (e) of this Section shall comply with subsections (c) by June 1, 1980 and with subsections (d) and (e) by June 1, 1981.

#### 7:27-16.4 OPEN TOP TANKS AND SURFACE CLEANERS

(Less Than 6 sq ft)  
open top

(a) No person shall cause, suffer, allow or permit the use of VOS in any unheated or heated open top tank unless such tank is covered by a lid which protects the VOS vapors from drafts and diffusion when the tank is not in active use.

(b) No person shall cause, suffer, allow or permit the use of VOS in any unheated open top surface cleaner having a top opening of more than 6 square feet (0.56 square meters) but not more than 25 square feet (2.3 square meters) unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOS; and

2. Is equipped with a rack or mechanism for ensuring that all draining liquid VOS returns into the surface cleaner VOS bath; and

3. Is devoid of any flushing wand which produces VOS droplets or mist or which delivers a stream of VOS under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge); and

4. Is devoid of any agitating system which causes splashing of VOS; and

5. Has a freeboard ratio of 0.5 or greater.

(c) No person shall cause, suffer, allow or permit the use of VOS in any unheated open top surface cleaner having a top opening of more than 25 square feet (2.3 square meters) unless such cleaner:

1. Has a visible high-level liquid mark which shall not be exceeded by the contained VOS; and

2. Is equipped with a rack or mechanism for ensuring that all draining liquid VOS returns into the surface cleaner VOS bath; and

3. Is devoid of any flushing wand which produces VOS droplets or mist or which delivers a stream of VOS under a line pressure in excess of 15 pounds per square inch gauge (776 millimeters of mercury gauge); and

4. Is devoid of any agitating system which causes splashing of VOS; and

New Jersey Bureau of Air Pollution Control  
Incomplete Permit Application

Company Westinghouse Electric Corporation  
Address 95 Orange St.  
Newark, N.J. 07101

Date: 9/13/82  
82-4048  
Tracking No. 82-4049

**IMPORTANT:** Please respond within 15 days of today or your application may be disapproved due to insufficient information.

Your application(s) are being returned without action. Please complete the following missing information on the application(s). All information required on these forms and relevant to your operation must be complete. It is imperative that these forms be returned as soon as possible to comply with our regulations.

PLEASE RETURN THIS SHEET WITH THE PERMIT APPLICATION. ALSO, IN FUTURE INQUIRIES ABOUT THIS APPLICATION, PLEASE REFER TO THE ABOVE TRACKING NUMBER.

FORM VEM-003

☐ sec. A-line 1 2 3 4 5 6 7 8 9

☒ sec. B

☒ sec. C

☐ signature:

(1) (2) (3) (4) (5) (6) (7) (8) (9)

the signature must be that of an officer or employee of the operating or owning organization whose name appears at the top of the form.

☐ sec. D

☐ IF THIS IS THE CASE, WE REQUIRE A-STATEMENT FROM YOU, FOR:

☐ smoke : will be no darker than No\_\_\_ On the Ringlemann scale.  
☐ odor : no odor beyond the property line  
☐ visible ash: none visible from this unit

FORM VEM-004

complete one VEM-004 for each source.

☒ sec. E-line

1 2 3 (4)

☐ sec. F

Give details as per attached sheet

☒ sec. G

Emissions of pollutants must be listed by name, and an amount given for each in pounds per hour. "None", "nil", "trace", "negligible" . . . are not acceptable. If it will be a convenience to you "less than \_\_\_ #/hr. or a similar statement may be entered.

☐ sec. H-line

A 1 2 3  
B 1 2 3 4 5 6 7  
C 1 2 3 4  
D 1 2 3 4 5 6 7 8

☒ additional fee required \$ 80.00 (\$40.00 for each)

Mrs. McIal Atay

For your information call: (609) 292-6710

845990087

Section C : Please complete this section. The nearest exhaust to the source (a window, a door etc) can be shown as exhaust.

Section G : Please specify 1,1,1, Trichloroethane or 1,1,2 Trichloroethane.  
Please charge emissions with control from 0  
(No control device can be 100% effective)

Please fill in the attached sheet for additional degreaser information.



Westinghouse Electric Corporation

Measurements Divisions

95 Orange Street  
Newark, N. J. 07101

Telephone: (201) 461-4444

ORDERS #19303, 19304, 19305  
Tracking #82-4048, 49, 50, 51, 52

. October 11, 1982

Department of Environmental Protection  
Division of Environmental Quality  
John Fitch Plaza, CN027,  
Trenton, New Jersey 08625

Attn: Mrs. Iclal Atay

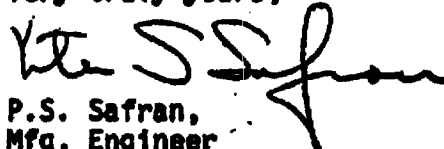
Enclosed are forms VEM-003 (and associated forms VEM-004) for the following equipment at this location.

I1 Exhaust (Tracking #80-4051) for various plating tanks, a steam treatment machine, and the degreaser (previously tracking #82-4048).

N1 Udyllite Exhaust, (Tracking #80-4052) for a group of tanks and for the open top degreaser (previously tracking #82-4049).

Our boiler stack (Tracking #82-4050) is not submitted because it has been in service for over 30 years. This was discussed with you, I believe, by our attorney, M. Gutman.

Very truly yours,

  
P.S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

Enclosures

cc: Mr. Ode Keiderling, Eng. Mgr.  
Department of Environmental Protection

832/8016091

845990089



**PRIVILEGED**

**Westinghouse  
Electric Corporation**

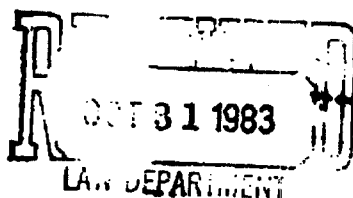
**Switchgear Divisions**

Relay-Instrument Division

95 Orange Street  
Newark New Jersey 07101  
(201) 485 0222

October 25, 1983

Ms. Michele M. Gutman  
Law Department  
Westinghouse Building - Rm. 1718  
Gateway Center  
Pittsburgh, Pennsylvania 15222



**Subject: Administrative Consent Order - Relay-Instrument Division -  
(3) Vapor Degreasers**

Please be advised that the (3) Vapor Degreasers described in the A.C.O. have been shut down completely, effective this date.

The three machines, along with their attached stills, have been completely drained. The Liquid Storage Tank used to supply the machines has been drained. All of the liquid solvent has been pumped into 55 gal. drums and is awaiting appropriate vendor pick-up for disposition.

In addition, the Ventilators associated with the (3) Degreasers have been shut down.

Kindly advise the State of New Jersey, Department of Environmental Protection of these developments so that the Department may rebate to the Corporation 90% of the settlement, to wit: \$22,500, per paragraph 9 and schedule A of the A.C.O.

The rebate should be sent to: Westinghouse Electric Corporation  
Relay-Instrument Division  
4300 Coral Ridge Drive  
Coral Springs, Florida 33065

C.J. Michelini, Jr.  
Plant Manager  
Relay-Instrument Division  
Newark Plant

CC: W. Wallace, Coral Springs  
J. McCully, Coral Springs

832/8016041

CJM:km

845990090

**Exhibit A**  
**Waste Management & Handling**

845990090A



*From* : Relay-Instrument Division  
*WIN* : 326-2435  
*Date* : March 11, 1970  
*Subject* : ENVIRONMENTAL POLLUTION


Gateway, 23 South

Mr. J. W. Stirling

Executive Vice President - T&D

---

In accordance with your request I am forwarding to you a report on  
Environmental Pollution as prepared by our Works Engineer.

  
A. J. Petzinger  
Measurements Divisions  
General Manager

845990091

NEWARK RELAY-INSTRUMENT REVIEW OF ENVIRONMENTAL  
POLLUTION

A review of systems, processes, and facilities at the Newark Plant indicate that, while there is no immediate real or apparent environmental pollution problem, there are several areas that should be of concern and merit further study.

AIR POLLUTION - Two areas should be analyzed in depth.

The exhaust systems from our plating and finishing departments may be considered as borderline and may present a problem in the future. While in all probability the absence of chrome and the volume of air being handled is of sufficient quantity to dilute pollutants to an acceptable level, the variety and quantity of equipment serviced by this exhaust system is such that a detailed study for conformance to the New Jersey Pollution code is warranted. It is difficult to estimate costs of abatement without a clear definition of the problem. If in truth a problem does exist it in all probability could be handled through the use of fume scrubbers. An approximate cost for such an installation would be from \$80,000 to \$120,000.

The spray booth in our electro-magnet assembly area Department F3 is an older dry type booth which without proper filter maintenance could on occasion discharge particulate matter into the atmosphere. Presently under consideration is the alteration of the existing system on the installation of a water wash spray booth both of which would guard against accidental pollution.

Approximate cost \$10,000

WATER POLLUTION

The one area which may be of some concern is the waste from our plating and finishing operations. Effluent from our plant is discharged into sewers belonging to the City of Newark which in turn are serviced by the Passaic Valley Sewerage Commission. The Commission is presently under pressure to improve its effluent by going to secondary treatment of its waste.

(cont'd)


845990092



Present regulations of the City of Newark are subject to broad interpretation and discretionary decisions on the part of the Chief Engineer of the Sewer Department. While original plans for the installation of our equipment were accepted and approved by the City it is felt that mounting pressures on the Passaic Valley Sewerage Commission may result in tightening present controls and regulations with respect to the effluent discharged by the user.

The Passaic Valley Sewerage authority is presently conducting a survey to be used as a basis for improvement of their treatment facility. The outgrowth of this survey may be a requirement that users such as Westinghouse provide some treatment of their effluent prior to discharging it into the system. This requirement, if it occurs, will probably take place in from 2 to 3 years.

The type of treatment which would be required by Westinghouse would be subject to review by the agencies providing service. Our best estimate for treatment facilities at this time is from \$60,000 for a flash type neutralizing plant to \$90,000 for one which would neutralize and remove metals. Further analysis and definition of this problem is presently underway.



S. C. Iannaccone  
Works Engineer

# WESTINGHOUSE ENVIRONMENTAL CONTROL SURVEY

Location of Plant (City, County, State) Newark, New Jersey

Survey Prepared By S. C. Iannaccone Date 9/24/71

Products Relays-Instruments-Supvr. Control

## Normal Plant Operation

A. Circle one: 1 (2) 3 Shifts Per Day

B. Circle one: (5) 6 7 Days Per Week

C. Number of employees 1400

## I. WATER SURVEY

### A. Water Supply

1. Total incoming water 4,341,480 gallons per week.

2. Source of water - circle one or more:

River Private Well

Municipal Water Supply Other (Specify)

B. Water Usage (Gallons per week or percentages of total incoming water supply. If percentages are used, total should be 100%.)

1. Domestic (drinking, sanitary, food preparation) 20%

2. Cooling 39%

3. Process 26%

4. Other (Examples: boilers - landscape) 4  
Well water storage 11  
Tank Overflow

5. Does incoming process water require additional treatment? No

## C. Cooling Water

1. Is cooling water recycled? Yes If yes, indicate processes for treatment prior to recycle Chromate treatment during recirculation.

2. Volume treated per week. 3,230,000 gpw.

3. Blowdown (gallons per week) 32,300 gpw.

4. Disposal of blowdown -

Storm Sewer Sanitary Sewer

Surface Watercourse

Other (Explain) Combination  
sanitary-storm sewer

D. Liquid wastes from air pollution control devices (wet scrubbers, etc.)

1. Volume (gal. per day or ~~3770~~) 1,000

2. Source Micarta Saw Wet Collector

3. Analyses Micarta dust in discharged water

## E. Water Conservation

1. Do you recycle any water? No

2. If so, specify source of recycled water by process

3. Volume of water recycled

4. Treatment of water previous to recycling

5. Analyses of water recycled after treatment

F. Treatment of waste water prior to final discharge:

1. Volume (gallons per shift or day) \_\_\_\_\_

2. Point of disposal: Circle one or more. If more than one, estimate percentage of volume for each.

Municipal Sewer      Surface Watercourse

Deepwell      Storm Drain

3. Please describe pretreatment or treatment facilities \_\_\_\_\_

None

G. Disposal of side streams (sludge, other solids; include solutions hauled away)

Material	Disposal	Quantity Per Week
<u>Ferric Chloride Hauled</u>	<u></u>	<u>50 Gal/Month</u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>

H. Capital cost of treatment facilities (and year)

None to date

1. Annual operating costs 0

2. Cost of hauling (annual) 0

3. Cost of use of municipal systems (annual) \$28,000

4. Number of treatment personnel 0

I. List regulatory agencies which now control discharge of liquid wastes and wastewaters.

Please attach copy of effluent standards you must meet.

Additional comments: (Please send us as much pertinent data as possible, including any reports you have made either internally or for regulating agencies. Please list any references you think would be useful in this audit, and name any individuals who could supply additional information.)

J. Manufacturing Processes - Complete a separate process sheet for each manufacturing process used. See attached examples.

## Manufacturing Process

**Name** \_\_\_\_\_

**Description (List steps in process)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

**Process production rate (average weekly production by unit: i.e. pounds per week)**

1000

Chemicals used (by steps above)	Quantity (used per week)	Concentration	By percentage:	Disposal 3 columns should total 100%		
			Hauled away	Flush	Consumed*	

\* Includes evaporation loss

**845990096**

Manufacturing Process (Example)

Name Chemical cleaning - aluminum

Description (Steps in process)

1. Degrease
2. Alkaline clean
3. Rinse
4. Deoxidize
5. Alodine
6. Rinse
7. Hot deionized rinse

Process production rate (average weekly production)

5000 lbs. per week.

Chemicals used (by steps above)	Quantity	Concentration	By percentage:	Disposal 3 columns must total 100%	
			Hauled away	Flush	Consumed*
1. Trichloroethane	400 gal per wk.	100%	5%	0%	95%
2. Altrax 1097 (alkaline cleaner)	200 lbs.	8 oz. per gal.	98%	2%	0%
3, 6, 7 Rinse	50000 gal. per week		0%	95%	5%
4. Deoxidizer (proprietary)	200 lbs.	16 oz. per gal.	99%	1%	0%
5. Alodine 1200 (proprietary)	100 lbs.	1-1/2 oz. per gal.	95%	1%	4%

\*Includes evaporation loss

Type of waste treatment at process site

Bisulfite and caustic soda added to rinse waters to convert hexavalent chrome to tri-valent chrome and control pH

Monitoring and chemical analyses

pH recording meter

Periodic chemical analyses of grab samples

845990097

## II. AIR SURVEY

A. Number of Fuel Burning Units at plant. The total number of units in which fuel combustion for indirect heating occurs, either for space heat or industrial use 2

B. Annual fuel usage. The total quantities of all fuels should be listed. If different grades of coal or fuel oil were used, they should be listed separately.

	Fuel Type	Quantity	(Units)	Sulfur Content (%)
1.	<u>#5 Oil</u>	<u>836,640</u>	<u>Gals.</u>	<u>0.5</u>
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____

C. Air Pollution Controls. Any controls removing particulate material or SO<sub>2</sub> from the flue gas streams should be specified in this item.

Equipment Type	Particulate Control Efficiency (%)	Amount of Combustion Capacity Controlled (%)
1. <u>None</u>	<u>--</u>	<u>--</u>
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

D. Applicable air pollution control code (Federal, State, local or regional) State  
N.J. Air Pollution Control Code  
 (See Attached)

SO <sub>2</sub>	ppm
NO <sub>x</sub>	ppm
CO	ppm
Hydrocarbons	ppm
Particulates	grains/SCF
Odors	ppm, micrograms/M <sup>3</sup> or scentometer No.

E. Name of air pollution control official in your

1. ~~County~~ City-Board of Health  
 Name Charles McGuire  
 Address City Hall, Broad St.  
 Telephone No. 201 MI 3-6300

2. State N. J. Dept. Environmental Contr  
 Name Richard Sullivan, Commissioner  
 Address John Fitch Plaza, Trenton, N.  
 Telephone No. 609 292-5383

F. Have you received any complaint(s) from any of the public officials?

Yes \_\_\_\_\_ No X

Last complaint - 1962

G. If yes, state nature and disposal status of complaint(s). Attach separate sheet.

H. Have you received any complaint(s) from the general public?

Yes X No \_\_\_\_\_

If yes, state nature and disposal status of complaint(s). Attach separate sheet.

If no, do you expect any in the future? Attach separate sheet.

845990098

### III. SOLID WASTE SURVEY

A. Type of solid waste. The section should present a comprehensive display of the types and quantities of solid wastes generated by plant operations. Quantities reported should reflect average daily operating conditions.

Type	Disposal		
	Quantity (Tons/Day)	On-Site (%)	Off-Site (%)
1. Rock, sand, gravel, etc.	0	0	100
2. Ash	0	0	100
3. Collected Fly Ash	0	0	100
4. Sludge	1/20	0	100
5. Metal Scrap, Containers	1/20	0	100
6. Paper Scrap, Containers	5	0	100
7. Plastic	1/40	0	100
8. Garbage	1/10	0	100
9. Glass	0	0	100
10. Other (specify) _____ <u>Wood</u>	1/5	0	100

B. Disposal Methods. All solid wastes produced must eventually be disposed of in some manner. The intent of this item is to indicate what disposal methods or techniques are currently in use at the plant site.

1. Total Off-Site Disposal  
(Tons/Day) \_\_\_\_\_ Cost (\$/Ton) \_\_\_\_\_
  - (a) Private Incineration \_\_\_\_\_ (%) \_\_\_\_\_
  - (b) Private Landfill 100 (%) \$6
  - (c) Private Sanitary Landfill \_\_\_\_\_ (%) \_\_\_\_\_

(d) Municipal Disposal \_\_\_\_\_ (%) \_\_\_\_\_

(e) By-Product Use Or Recovery \_\_\_\_\_ (%) \_\_\_\_\_

(f) Other (Specify) \_\_\_\_\_ (%) \_\_\_\_\_

#### 2. Total On-Site Disposal (Tons/Day)

(a) Incineration\* \_\_\_\_\_ (%) \_\_\_\_\_

(b) Landfill \_\_\_\_\_ (%) \_\_\_\_\_

(c) Other (Specify) \_\_\_\_\_ (%) \_\_\_\_\_

Comments:

Solid Waste Removed by Scavenger.

\*On-Site incineration, while providing a solution to a solid waste problem, may create an air pollution situation.

### IV. NOISE SURVEY

A. Objective Noise Measurements. Information concerning objective sound level measurements is desired.

1. Have environmental noise measurements been made? Yes X No \_\_\_\_\_

- If Yes (a) Date of last measurement 6/15/71
- (b) Organization or group conducting tests State Dept. of Labor
- (c) Type of equipment used G.R.C. 1565
- (d) Maximum Boundary-Line Sound Levels (dB) \_\_\_\_\_
- (e) Report of tests: Enclosed \_\_\_\_\_  
Available \_\_\_\_\_  
Unavailable X

B. Complaints of Excessive Noise. In the absence of objective environmental criteria relating to noise, complaints may be used in identifying and defining any potential problems. Parts (a) and (b) of this item refer to employee and community generated complaints, respectively.

1. Are complaints received from workers regarding noise? Yes \_\_\_\_\_ No X

If Yes (a) Describe source(s) of noise referred to in complaints \_\_\_\_\_

(b) Has protective or remedial action been taken? Yes \_\_\_\_\_ No \_\_\_\_\_

2. Have persons in the area of this facility complained to plant or local authorities concerning noise from this plant?

Yes \_\_\_\_\_ No X

If Yes (a) Describe circumstances, action taken and deposition of this complaint \_\_\_\_\_

- C. Noise Producing Equipment. A general descriptive title should be used.

List below equipment capable of generating high sound levels.

Type Of Equipment	Number	Hours Operated/Shift
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Comments:

Survey of plant with Dept. of Labor  
to determine employee exposure to  
excessive noise resulted in negative  
findings.

## V. RADIOACTIVE MATERIALS

### A. Use of Radioactive Materials:

1. Are radio isotopes at this facility? Yes \_\_\_\_\_ No X If No, do not complete remainder of this form.

2. Type of use. Define generally what use is made of the radioactive material; specifics are not necessary.

(a) Manufacturing \_\_\_\_\_

(b) Testing \_\_\_\_\_

(c) Research \_\_\_\_\_

(d) Other \_\_\_\_\_ (Specify) \_\_\_\_\_

### B. Individual Responsible for Control of the Radioactive Materials:

1. Name: \_\_\_\_\_

2. Title: \_\_\_\_\_

3. Organization: \_\_\_\_\_

4. Area Code/Phone/Extension: \_\_\_\_\_

### C. Type and Quantities of Material Utilized:

1. Average quantity of radio isotopes on hand during 1970 \_\_\_\_\_ (Curies, C)

2. Isotopic composition of the above. Chemical symbol and atomic weight are sufficient; i.e.,  $^{131}\text{I}$ ,  $\text{Sr}^{90}$ ,  $\text{U}^{235}$ . Quantities may be expressed in curies or microcuries, whichever is more convenient.

(a) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(b) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(c) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(d) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)



3. Amount of radioactive material in sealed sources \_\_\_\_\_ (c). (Radio isotopes in this form are not dangerous from an environmental contamination standpoint.)

D. Removal or release of radioactive material:

1. Quantity of material leaving plant (1970) (c) \_\_\_\_\_

2. Specific isotopes involved. This item should be filled in as fully as possible including the quantities associated with each type of release.

	<u>Radioisotope</u>	<u>Incorporated In Product (c)</u>	<u>Release To Environment (c)</u>
(a)	_____	_____	_____
(b)	_____	_____	_____
(c)	_____	_____	_____
(d)	_____	_____	_____
(e)	_____	_____	_____

3. Amount of Radioactive Material accidentally released 1970 \_\_\_\_\_. Any substantial accidental release should be fully documented in an attachment.

E. Form of Release to Environment:

1. Amount of radioactive materials given special handling disposal 1970 (c) \_\_\_\_\_

2. Conditions of release to the air.

	<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity (uc/m<sup>3</sup>)</u>	<u>Type Of Release*</u>
(a)	_____	_____	_____	_____	_____

- (b) \_\_\_\_\_  
(c) \_\_\_\_\_

3. Conditions of release to the water:

	<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity (uc/l)</u>	<u>Type Of Release*</u>
(a)	_____	_____	_____	_____	_____
(b)	_____	_____	_____	_____	_____
(c)	_____	_____	_____	_____	_____

4. Conditions of release in solid waste:

	<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity (uc/lb)</u>	<u>Special Handling</u>
(a)	_____	_____	_____	_____	_____
(b)	_____	_____	_____	_____	_____
(c)	_____	_____	_____	_____	_____

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*Continuous, Intermittent, Accidental



# UNITED STATES TESTING COMPANY, INC.

## REPORT OF WATER AND WASTEWATER ANALYSIS

Page 4 of 6

Client: Westinghouse, Newark, N.J.

Report No.: 67170

Date: 6/12/71

Sample No.: 3 Description Composite of all 6 lines.

Sample No.: Description

TEST	SAMPLE NO.		TEST	SAMPLE NO.
	3			3
Acidity (as CaCO <sub>3</sub> )			Surfactants	
Alkalinity, Total (as CaCO <sub>3</sub> )			Aluminum	
Alkalinity			Antimony	
Hydroxide			Arsenic	
Carbonate			Beryllium	
Bicarbonate			Cadmium	
Bromides	2.5		Calcium	
Total Organic Carbon	19.65		Chromium, Total	
Chemical Oxygen Demand (COD)	656.0		Chromium, Hexavalent	
Chlorides	190		Cobalt	
Chlorine Residual			Copper	<0.1
Chlorinated Hydrocarbons			Iron	<0.1
Cyanides	0.44		Lead	<0.3
Fluorides	0.3		Magnesium	
Hardness, Total			Manganese	
Iodide			Mercury	.0007
Nitrogen			Molybdenum	0.4
Ammonia			Nickel	
Nitrate			Potassium	
Nitrite			Selenium	
Kjeldahl			Sodium	
Oil/Grease	4.0		Tin	
pH (Units)	7.2		Titanium	
Phenols			Zinc	0.59
Phosphate, Total			Immediate Oxygen Demand	
Silica, Dissolved			Biochemical Oxygen Demand (5 days)	11.1
Solids			Biochemical Oxygen Demand (20 days)	
Total	796		Coliform, Total (MPN/100 mls.)	
Suspended	20		Coliform, Fecal (MPN/100 mls.)	
Volatile	172		Fecal Streptococcus (MPN/100 mls.)	
Total Dissolved			Total Plate Count (per ml.)	
Volatile Suspended	10		Odor (Units)	
Settleable Solids			Color (Units)	
Sulfates	200		Specific Conductance (micromhos/cm.)	
Sulfides			Taste (Units)	
Sulfites			Turbidity (J.T.U.)	<18
Total Non-Volatile Suspended	10		Silver	<0.1
Total Non-Volatile Solids	624			

Note: All Results are given in mg./l. unless otherwise shown.

REMARKS:

845990102

United States Testing Company, Inc.

CLIENT: Westinghouse, Newark, N.J.

67170  
M-315  
Number

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Aluminum	m	ml	m
Arsenic	ND	-	-
Antimony	ND	-	-
Barium	ND	-	-
Boron	ND	-	-
Bismuth	ND	-	-
Cadmium	ND	-	-
Calcium	P	P	P
Chromium	ND	ND	m
Cobalt	ND	-	-
Copper	t	m	t
Iron	Ml	Ml	M
Lead	tl	-	-
Lithium	ND	-	-
Magnesium	Ml	-	-
Manganese	tl	-	-
Molybdenum	ND	-	-
Niobium	ND	-	-
Nickel	ml	m	ml
Sodium	Pl	M	Pl
Silicon	M	Ml	Ml
Silver	tt	-	-
Tantalum	ND	-	-
Tin	tl	t	tl

United States Testing Company, Inc.  
CLIENT: Westinghouse, Newark, N.J.

671  
M-3  
Nu

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Titanium	tl	-	-
Tungsten	ND	-	-
Vanadium	ND	-	-
Zinc	tl	-	-
Zirconium	ND	-	-

Percent of total solids.

P - 10 to 100%

M - 1 to 10%

m - .1 to 1.0%

t - .01 to .1%

tt - less than 0.01%

vft - very faint trace

\* - less than figure shown

h - Upper half of range shown

l - Lower half of range shown

ND - Not detected



# UNITED STATES TESTING COMPANY, INC.

## REPORT OF WATER AND WASTEWATER ANALYSIS

Page 4 of 6

Client: Westinghouse, Newark, N.J.

Report No.: 67170

Date: 6/12/72

Sample No.: 3 Description Composite of all 6 lines.

Sample No.: Description

TEST		SAMPLE NO.	TEST		SAMPLE
		3			3
Acidity (as CaCO <sub>3</sub> )			Surfactants		
Alkalinity, Total (as CaCO <sub>3</sub> )			Aluminum		
Alkalinity			Antimony		
Hydroxide			Arsenic		
Carbonate			Beryllium		
Bicarbonate			Cadmium		
Bromides		2.5	Calcium		
Total Organic Carbon		19.65	Chromium, Total		
Chemical Oxygen Demand (COD)		656.0	Chromium, Hexavalent		
Chlorides		190	Cobalt		
Chlorine Residual			Copper		<0.1
Chlorinated Hydrocarbons			Iron		<0.1
Cyanides		0.44 ✓	Lead		<0.3
Fluorides		0.3	Magnesium		
Hardness, Total			Manganese		
Iodide			Mercury		.0007
Nitrogen			Molybdenum		0.4
Ammonia			Nickel		
Nitrate			Potassium		
Nitrite			Selenium		
Kjeldahl			Sodium		
Oil/Grease		4.0	Tin		
pH (Units)		7.2	Titanium		
Phenols			Zinc		0.59
Phosphate, Total			Immediate Oxygen Demand		
Silica, Dissolved			Biochemical Oxygen Demand (5 days)		11.1
Solids			Biochemical Oxygen Demand (20 days)		
Total		796	Coliform, Total (MPN/100 mls.)		
Suspended		20	Coliform, Fecal (MPN/100 mls.)		
Volatile		172	Fecal Streptococcus (MPN/100 mls.)		
Total Dissolved			Total Plate Count (per ml.)		
Volatile Suspended		10	Odor (Units)		
Settleable Solids			Color (Units)		
Sulfates		200	Specific Conductance (micromhos/cm.)		
Sulfides			Taste (Units)		
Sulfites			Turbidity (J.T.U.)		<18
Total Non-Volatile Suspended		10	Silver		<0.1
Total Non-Volatile Solids		624			

Note: All Results are given in mg./l. unless otherwise shown.

### REMARKS:

845990105

United States Testing Company, Inc.  
CLIENT: Westinghouse, Newark, N.J.

67170  
M-315  
Number

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Aluminum	m	ml	m
Arsenic	ND	-	-
Antimony	ND	-	-
Barium	ND	-	-
Boron	ND	-	-
Bismuth	ND	-	-
Cadmium	ND	-	-
Calcium	P	P	P
Chromium	ND	ND	m
Cobalt	ND	-	-
Copper	t	<u>m</u>	t
Iron	Ml	Ml	M
Lead	tl	-	-
Lithium	ND	-	-
Magnesium	Ml	-	-
Manganese	tl	-	-
Molybdenum	ND	-	-
Niobium	ND	-	-
Nickel	ml	m	ml
Sodium	Pl	M	Pl
Silicon	M	Ml	Ml
Silver	ft	-	-
Tantalum	ND	-	-
Tin	tl	t	tl

United States Testing Company, Inc.  
CLIENT: Westinghouse, Newark, N.J.

6717  
M-31  
Num

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Titanium	tl	-	-
Tungsten	ND	-	-
Vanadium	ND	-	-
Zinc	tl	-	-
Zirconium	ND	-	-

Percent of total solids.

P - 10 to 100%  
M - 1 to 10%  
m - .1 to 1.0%  
t - .01 to .1%  
ft - less than 0.01%  
vft - very faint trace

\* - less than figure shown  
h - Upper half of range shown  
l - Lower half of range shown  
NB - Not detected

March 19, 1975

Mr. John W. Kinder  
Industrial Liaison  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, N. J. 07105

Dear Mr. Kinder:

Per the request of the PVSC I am enclosing the following information.

One diagram indicating all connections from the Westinghouse Relay-Instrument Division, into the City of Newark sewerage system. This drawing also indicates the points at which we took individual samples to arrive at a composite sample which was used as a basis for the analytical information requested.

Per our conversation, I have re-submitted the information originally furnished to you during the latter part of 1972. A review of the manufacturing and process operations at this location indicates that there has been little or no change in the type and quantity of product produced. While our water usage for the year 1974 was lower than that of 1971, this could be attributed to the fact that we have undertaken an energy conservation program and have greatly reduced the number of operating hours for our boilers and air conditioning equipment.

The wastewater and sampling analyses were done by the United States Testing Co. Inc. (a copy of their report is attached). If any additional information is required, please do not hesitate to contact me.

Yours truly,

S. C. Iannaccone, Manager Works Engineering

cc: Mr. M. W. Mardis, Manager Relay-Instrument Division  
cc: Mr. B. A. Kerma, Manager Environmental Control

845990108



NEWARK 1-1-76

CARMINE T. FERRAPATO  
CHAIRMAN

THOMAS J. CIFELLI  
VICE CHAIRMAN

ROBERT J. DAVENPORT  
BEN W. GORDON  
JOSEPH M. KEEGAN  
CHARLES A. LAGOS  
COMMISSIONERS

PASSAIC VALLEY SEWERAGE COMMISSIONERS

600 WILSON AVENUE  
NEWARK, N.J. 07105  
(201) 344-1800

54

SEYMOUR A. LUBETKIN  
CHIEF ENGINEER

CHARLES C. CARELLA  
CHIEF COUNSEL

MRS. CHARLES T. SCHAEDEL  
CLERK-TREASURER

*Back  
for your information  
Any suggestions  
Sal -*

Westinghouse Electric Corporation  
Relay Instrument Division  
90 Orange Street  
Newark, New Jersey 07101

Gentlemen:

On August 1, 1976 the Passaic Valley Sewerage Commissioners established Rules and Regulations concerning sewer connection permits. These rules require that industrial users apply for a permit in order to discharge industrial wastes to the sanitary sewer.

Enclosed is a copy of the Rules and Regulations with the application attached. Please complete and forward to the designated Municipal Official for certification. If information requested as Exhibit A, B, or C has been previously submitted to Passaic Valley Sewerage Commissioners, and the information contained therein has not changed significantly, it need not be repeated. However, PVSC reserves the right to require additional data as necessary.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

*Frank P. D'Ascenso*  
Frank P. D'Ascenso

FPD:rv

P.S. Remit completed application to:  
Mr. N. Valenti  
Dept. of Engineering  
Room 411 - City Hall  
Newark, N.J. 07102

845990109

NPDES - National Pollution Discharge Elimination System

pH - The reciprocal of the logarithm of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water has a pH value of 7 (a hydrogen ion concentration of  $10^{-7}$ ). Lower pH's are acid, higher pH's are alkaline.

Pretreatment - Treatment given to industrial waste, prior to its discharge to the PVSC facilities, by the industry, in order to remove illegal and/or undesirable constituents or to reduce the strength of the waste.

Property Owner - Owner of the property wherein an industry discharging to the PVSC facilities is located.

PVSC - Passaic Valley Sewerage Commissioners

Sanitary Waste - Waste derived principally from dwellings, office buildings, and sanitary conveniences. When segregated from industrial wastes, may come from industrial plants or commercial enterprises.

Strength of Waste - A measurement of suspended solids, and/or Biochemical Oxygen Demand, and/or Chemical Oxygen Demand, and/or any other parameter determined by PVSC as a fair indicator of the relative use, other than volumetric, of PVSC facilities by industrial wastes.

Toxic Wastes in Toxic Amounts - Defined by USEPA in 40 CFR 129 (38 F.R. 24342, 9-7-73) and any subsequent revisions.

USEPA - United States Environmental Protection Agency

User Charge - A charge to users, established by PVSC, based on volume and, where applicable, on strength and/or flow rate to pay for the use of the PVSC facilities.

2) Any person, corporation or municipality, or other governmental agency desiring to make any sewerage connection or discharge or to continue to discharge sewerage, which includes or consists of industrial waste, into the PVSC treatment facilities, must make application therefor in writing on forms provided by the PVSC. All existing industrial users are required to make such application by June 1, 1977. Any new facilities shall be required to make application prior to the connection.

3) There shall be two major forms of Application:

(a) Sanitary Application - application from dwellings, groups of dwellings, or industrial or commercial establishments with only sanitary waste.

(b) Industrial Application - for industrial waste or storm water from an industrial site.

Sanitary applications shall be made by the owner of the property to the municipality, and no approval by PVSC is necessary unless a direct connection into a PVSC sewer is being requested. However, the municipality shall keep a record of the number of connections that are added and removed and shall make an annual report to the PVSC no later than February 1 of each year.

Industrial applications shall be made by the industry that generates the waste; however, the application must also be signed by the owner of the property wherein the industry is located. The industry shall be responsible for the quality and quantity of the waste, but the industry and owner of the property shall be jointly and severally responsible for any user charges or industrial cost recovery charges, and such charges when not paid may be made a lien against the property, and interest may be charged.

4) Any existing facility which proposes to make any change in its facility or its processing, which significantly affects either the quality or the quantity of its discharge into the sewerage system, shall be required to submit an Industrial Sewer Waste Revision Application showing the changes contemplated. Any new tenant or occupant of an existing facility shall be required to submit an Industrial Sewer Waste Revision Application. The application must be accompanied by a written approval of the particular municipality and owner of the property that are responsible for such sewerage.

5) Existing industries that have applied for permits may continue their discharge until their application has been processed by PVSC, unless in violation of Section 18, "Prohibited Wastes" of these regulations, or unless notified by PVSC to cease and desist their discharge.

6) Applications for Industrial Permits issued by PVSC shall be classified in one of these categories and the applicant and municipality shall be notified as expediently as possible:

Category I:

Class I-A permit which shall not be issued to an industry defined as a major industry is issued allowing industry to continue to discharge with no modification or pretreatment of flow.

Class I-B permit is issued allowing industry to continue to discharge with no modification or pretreatment of flow, but industry is considered a major industry and may be required to install monitoring equipment.

Category II:

Class II-A permit allows industry to continue to discharge pretreated wastes in accordance with standards established in the permit.

Class II-B permit allows industry to continue to discharge subject to change of characteristics of its waste by pretreatment or other means in accordance with a schedule as established or to be established in the permit.

Category III:

Permit denied and the discharge of illegal material must be halted or modified by a date established by PVSC.

PVSC reserves the right to change any Class permit to any other class permit, or to cancel permits upon notification by certified mail giving six months notice and giving the reason for the change.

7) Class I-A, I-B, and II-A permits shall be for an indefinite period of time unless cancelled or modified by PVSC.

8) Class II-B shall be for a period of time specified in the notice of classification requiring the industry to modify its discharge so that a Class II-A permit may be issued.

9) If an industry receives a Class II permit and disagrees with the findings of PVSC, it may appeal to the PVSC and request a hearing. The appeal shall be sent "Certified Mail" to the PVSC, 600 Wilson Avenue, Newark, N. J., 07105, within thirty days of notification by PVSC of the granting of the permit or of any modification of an existing permit. The Permittee shall obtain a return receipt showing date the appeal application was received by PVSC. During the time of appeal, the Class II permit requirements are stayed; however, the staying of such requirements shall not release any industry from the obligation of meeting any requirements and any time schedule set by NJDEP or USEPA.

10) Any appeal request shall be heard by the Commissioners. The findings of the Commissioners may be submitted to USEPA and/or NJDEP and upon approval by either or both shall either be incorporated in a new permit or the existing permit shall be reaffirmed.

11) An application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer to make such applications on behalf of the corporation. In the case of a partnership, the application must be signed by a general partner or proprietor. If the owner of the property is a corporation, other than the applicant, then the application must also be signed by the property owner as per the above.

Where an application involves a governmental discharge, the person signing on behalf of a municipal, county or intra-State regional governmental unit; if the applicant is a State or multi-State agency, the application must be signed by that agency's principal executive officer or one who reports directly to him and is authorized to make applications on behalf of the governmental unit. Applications submitted by an agency of the United States should be signed by an official who is authorized to evaluate environmental factors on an agency-wide basis.

12) Each user municipality shall designate an official who shall have the responsibility to supervise and enforce municipal connections and sewer requirements. The name of such designated official shall be submitted to the PVSC by the municipality.

13) In addition to the application, each industrial user must complete an industrial survey form which is supplied by PVSC, unless the industrial user has previously completed and submitted such a form to the PVSC.

14) When the industry is classified as a Major Industry, it will install an approved, sealed, automatic monitoring system if requested to make such installation by PVSC.

15) No uncontaminated water (e.g. cooling water, etc.) shall be discharged into the PVSC system except with the prior written consent of the PVSC.

16) When pretreatment standards are adopted by USEPA for any given class of industries, then that industry must immediately conform to the USEPA timetable for adherence to Federal (and therefore PVSC) pretreatment requirements, and any other applicable requirements promulgated by USEPA in accordance with Section 307 of P.L. 92-500. Additionally, such industries shall comply with any more stringent standards necessitated by local conditions as determined from time to time by the PVSC.

17) A PVSC inspector or authorized employee of PVSC, NJDEP, USEPA, or the municipality, must be given immediate access to any industry at any time during normal working hours or at any other time that an industry is discharging into either the PVSC system or into any of the waters under jurisdiction of the PVSC in order that the inspector may check the quality of the discharge, take samples, tests, and measurements.

18) The following wastes may never be discharged into the PVSC system:

- (a) Wastes that may create a fire or explosion hazard in the sewer, or wastewater facility, such as gasoline, fuel oil, cleaning solvents, etc.
- (b) Wastes that may impair the hydraulic capacity of the sewer system, such as ashes, sand, metal, etc.
- (c) Wastes that may create a hazard to people, the sewer system, the treatment process, or the receiving water, such as dangerous levels of toxic materials.

19) The following wastes may not be discharged without special permission, available on a case by case basis after the applicant proves the discharge not to be detrimental by reason of small volume:

- (a) Any discharge in excess of 150°F (65°C).
- (b) Any discharge containing more than background level of radioactivity.
- (c) Any discharge containing more than <sup>100</sup>~~25~~ mg/l of mineral oil or grease.
- (d) Any discharge containing floatable oil or grease.
- (e) Any discharge of heavy metals, cyanides or any other toxic materials in toxic amounts, which amounts are to be established by PVSC.
- (f) Any discharge quantities of flow or concentration which shall constitute a "slug". A "slug" shall mean a discharge of a rate of flow or concentration of any given constituent which exceeds for any period of 15 minutes more than five times the average daily concentration.
- (g) Wastes with pH outside the limits of 5.0 to 9.0.

20) Each major industrial user shall construct or otherwise have available a sampling point for sampling wastewater before it enters the municipal sewer system. Other industrial users may be required to construct such sampling point.

21) No discharge into the treatment facilities of PVSC shall be permitted from any source which causes physical damage, interferes with the treatment process, or results in a violation of effluent limitations or other conditions contained in the National Pollution Discharge Elimination System Permit to Discharge issued to PVSC by the USEPA.

22) Wherein required by USEPA, NJDEP, or the PVSC permit, each industrial user shall monitor its flow and maintain records in accordance with 40 CFR 136.3 or subsequent amendments.

23) If the industrial user violates any of the terms of the permit or regulations, he shall be subject to civil and/or criminal penalties and fines in accordance with judicial procedures as provided for in Section 309 of P.L. 92-500.

24) Violation of any of the terms of the permit or regulations, or of any municipal ordinance, may result in the termination of the permit and/or termination of authorization to discharge into the PVSC system.

25) The within rules and regulations shall be effective August 1, 1976.



INDUSTRIAL SEWER CONNECTION APPLICATION

Name \_\_\_\_\_

Number & Street \_\_\_\_\_

Municipality \_\_\_\_\_

Primary Standard Industrial Classification Code \_\_\_\_\_

Principal Product \_\_\_\_\_

Principal Raw Material \_\_\_\_\_

Flow (Indicate the volume  
of waste discharged  
to the PVSC system  
in thousand gallons  
per day and whether  
the discharge is in-  
termittent or con-  
tinuous) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned being the \_\_\_\_\_ of the above  
(owners, lessee, tenant, etc.)  
property does hereby request a permit to \_\_\_\_\_ an in-  
(install, use)  
dustrial sewer connection to discharge into the \_\_\_\_\_ inch  
(size)  
\_\_\_\_\_ sewer located at \_\_\_\_\_  
(municipality, PVSC)

The size of the connection is \_\_\_\_\_ inches.

A plan of the property showing accurately all sewers and drains  
now existing, together with existing or proposed sampling point, is  
attached hereto as Exhibit "A".

Details of the connection to the public sewer is shown as Exhibit  
"B".

A schedule of all process waters and industrial wastes produced  
or expected to be produced at said property, including a description  
of the character of each waste, daily volume, maximum rates of dis-  
charge, duration of discharge, and a representative analysis is at-  
tached as Exhibit "C".

845990117

The name and telephone number of the person to call for further details is \_\_\_\_\_.

In consideration of the granting of this permit, the undersigned agrees:

- (1) To furnish any additional information relating to the installation or use of the industrial sewer for which this permit is being sought, if requested by PVSC.
- (2) To accept and abide by all the rules and regulations of the PVSC and of the approving municipality.
- (3) To operate and maintain any waste pretreatment facilities, if such facilities are required by the USEPA, the NJDEP, or the PVSC, in an efficient manner at all times, at no expense to PVSC.
- (4) To cooperate at all times with the PVSC and their authorized representatives in their inspection, sampling and studying of the industrial wastes, and any facilities for pretreatment.
- (5) If the industry is classified as a major industry (USEPA definition) then, if requested by PVSC, install sampling or monitoring equipment as approved by PVSC.
- (6) To pay user charges and industrial cost recovery charges when such charges are promulgated by PVSC.
- (7) To notify PVSC immediately in the event of an accident, negligence or other occurrence that occasions a discharge to the sewer of any waste not covered by the permit or of a discharge to any of the streams under the jurisdiction of the PVSC.
- (8) To comply with all applicable Federal and State statutes and regulations as well as the terms of any National Pollutant Discharge Elimination System Permit to Discharge issued by the United States Environmental Protection Agency to the PVSC.

DATE: \_\_\_\_\_

SIGNED: \_\_\_\_\_  
(Applicant)

\_\_\_\_\_  
(Title)

If a corporation, attach resolution giving authority to make application

845990118

The undersigned hereby certifies that it is the owner of the property and agrees that it will be responsible for all user charges and/or industrial cost recovery for any industrial waste emanating from the above property, and failure to pay such costs when levied shall subject the property to a lien on such property not to be lifted until all such costs plus interest shall be paid.

DATE: \_\_\_\_\_ SIGNED: \_\_\_\_\_  
TITLE: \_\_\_\_\_

If a corporation, attach resolution giving authority to sign application.

The \_\_\_\_\_ hereby approves the above application and certifies to PVSC that it will be responsible for payment for the wastewater discharge from the above plant into the PVSC system in accordance with the rules and regulations of the PVSC.  
(municipality)

DATE: \_\_\_\_\_ SIGNED: \_\_\_\_\_  
(Authorized Municipal Official)  
TITLE: \_\_\_\_\_

APPROVED AT PVSC BOARD MEETING OF \_\_\_\_\_

SIGNED: \_\_\_\_\_  
Clerk of the Passaic  
Valley Sewerage Com-  
missioners

RULES AND REGULATIONS OF THE PVSC  
CONCERNING SEWER CONNECTION PERMITS

1) DEFINITIONS

As used in this regulation, the following words and terms shall have the meaning set forth below:

Industrial Cost Recovery - A charge to industrial users based on its use of PVSC facilities to repay the capital cost outlay of the Federal Share given PVSC under P.L. 92-500 allocable to the treatment of the wastes from the industrial user.

Industrial User - Any non-governmental user of PVSC facilities identified in the Standard Industrial Classification Manual 1972 as amended and supplemented under Divisions A, B, D, E, or I. A user may be excluded if it is determined that it introduces primarily segregated sanitary wastes.

Industrial Waste - The liquid waste from an industrial process, as distinct from sanitary waste. All wastes, except storm waters and sanitary wastes.

Major Industry - An industrial user of PVSC facilities that:

- (a) has a flow of 50,000 gallons or more per average work day;
- (b) has in its waste, a toxic pollutant in toxic amounts; or,
- (c) is found by USEPA, NJDEP or PVSC to have significant impact, either singly or in combination with other contributing industries, on the PVSC treatment works or upon the quality of the effluent from the PVSC treatment works.

Municipality - The municipality wherein an industry or other user discharging to PVSC facilities is located.

NJDEP - New Jersey Department of Environmental Protection

NEWARK N.J.

(412) 255-3616

January 11, 1977

Mr. Herbert Wortreich  
N.J. State Dept. of Environmental Protection  
Bureau of Air Pollution Control  
P. O. Box 2807  
Trenton, NJ 08625

Dear Mr. Wortreich:

Attached find the information requested jointly by the New Jersey Department of Environmental Protection and the U.S. Environmental Protection Agency for the Westinghouse plant at Newark, NJ. This mailing now completes the Westinghouse response to your request.

Yours truly,

B. A. Kerns, Manager  
Environmental Control  
Construction Technology

Attachment

/ml

845990121

## I. GENERAL INFORMATION

- A. Company Name Westinghouse Electric Corporation  
 Plant Address 95 Orange Street  
 City Newark, NJ Zip Code 07101  
 Mailing Address 95 Orange Street  
 City Newark, NJ Zip Code 07101
- B. Person to contact about form S. C. Iannaccone  
 Telephone 201-465-2432 Title Works Engineering Manager
- C. Approximate number of employees 1,000
- D. Nature of Business Relay-Instrument manufacturing
- E. SIC #25-0877540
- F. Normal Operating schedule  
16 hrs./day 5 days/wk. 52 wks./yrs.
- G. Approximate Percent Seasonal Operation:

Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Total
25	25	25	25	=100%

- H. Are volatile organic or solvent-containing materials such as cleaning fluids, coatings, adhesives, inks, etc. used in your operation? x Yes no

If no, sign form and return

If Yes, sign form and complete only the sections pertaining to your operations:

II. Degreasing----- Page 2, 8 & 9

III. Surface Coating Applications

- ☒ A. Fabric and Rubberland----- 3, 8 & 9  
 B. Protective or Decorative other than III-A----- 4, 8 & 9  
 C. Printing----- 5, 8 & 9

Adhesives, Resins, etc.----- 6, 8 & 9

A. Type of degreasing: ☐ cold solvent cleaning

☒ vapor degreasing

B. Type and amount of solvent purchased for degreasing operations.

1) Stoddard	_____	Gal /yr	
2) 1,1,1-Trichloroethane (Chloroethane VG)	_____	Gal /yr	
3) Perchloroethylene	_____	Gal /yr	
4) Methylene chloride	_____	Gal /yr	
5) Trichloroethylene	8,470	Gal /yr	51550BZ00A
6) Other (specify) <sup>1</sup>	_____	Gal /yr	
7) Other (specify)	_____	Gal /yr	

C. Name and Address of  
Solvent Suppliers

1.	<u>Baron-Blakeslee</u>
	<u>Garden City, NY 11530</u>
2.	<u>McKesson Chemical</u>
	<u>Avenel, NJ 07001</u>
3.	_____

D. Amount of each solvent returned for reprocessing to vendor or collector

1) Stoddard	_____	Gal /yr	
2) 1,1,1-Trichloroethane	_____	Gal /yr	
3) Perchloroethylene	_____	Gal /yr	
4) Methylene chloride	_____	Gal /yr	
5) Trichloroethylene	None	Gal /yr	
6) Other (specify) <sup>1</sup>	_____	Gal /yr	
7) Other (specify)	_____	Gal /yr	

E. Solvent disposal method (landfill, recycle, sewer, etc.)

Recycle





### III-B. PROTECTIVE OR DECORATIVE COATINGS<sup>1</sup> FOR EQUIPMENT

1. Indicate material being coated Aluminum Plates, Steel, Phenolic,

Electromagnets

2. Type and amount of coating used:

Source <sup>1</sup> Number	State Application Method: Spraying, Dipping, Roller, Flow, etc.	Type of paint <sup>2</sup>	Amount Gals /yr	% solids	Type <sup>3</sup> and % of major solvents
2(a)	(D-B) Spraying (white)	Lacquer	250	50	Xylene 50
2(b)	(D-B) Spraying (acrylic)	Enamel	15	30	Xylene 70
3	(N-1) Spraying (black)	Enamel	3,050	45	Xylene 55
					(1,677 gals.)
4	(F-3) Spraying (15Q)	Lacquer	420	45	Lac. Thinner 55
					(230 gals.)
5	(F-3) Spraying (28Q)	Enamel	150	45	Xylene 55
					(80 gals.)

3. Type<sup>3</sup> and amount of thinner used for dilution and cleaning not included above

Type Xylene Amount 380 Gal /yr

Type Lacquer Thinner Amount 330 Gal /yr

4. Please complete Section V, page 8.

<sup>1</sup> A source is an individual or similar pieces of equipment such as spray booths, tanks, dryers, etc. It should correspond to the Source Number on page 8. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions report" (Form 158-R75).

<sup>2</sup> Paint, varnish, shell, lacquer, enamel, thinner, etc.

1. Indicate material being coated Electromagnets

2. Type and amount of coating used:

Source <sup>1</sup> Number	State Application Method: Spraying, Dipping, Rolling, etc.	Type of paint <sup>2</sup>	Amount Gals./yr	% solids	Type <sup>3</sup> and % of major solvents
6	(F-3) Dipping (Vinyl)	Lac.	262	20	Acetone Toluene
7	(F-3) Dip (Silicone)	Varnish	15	49	Methyl Cellosolve (9 gals.)
8	(F-3) Dip (Black)	Varnish	210	50	Mineral Spirits

3. Type<sup>3</sup> and amount of thinner used for dilution and cleaning not included

Type	Acetone	Amount	155	Gals./yr
Type	Toluene	Amount	155	Gals./yr
Type	Methyl Cellosolve	Amount	90	Gals./yr
Type	Mineral Spirits	Amount	1390	Gals./yr

4. Please complete Section V, Page 8.

<sup>1</sup>A source is an individual or similar pieces of equipment such as spray booths, tanks, dryers, etc. It should correspond to the Source Number on page 6. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions Report" (Form 158-R75).

<sup>2</sup>Paint, varnish, enamel, lacquer, enamel, primer, etc.

<sup>3</sup>See Appendix 1.

1. Indicate material being coated Misc. Metals, Micarta,  
Phenolic, etc.

2. Type and amount of coating used:

Source Number	State Application Method: Spraying, Dipping, Roller, Flow, etc.	Type of paint <sup>2</sup>	Amount Gals /yr	% solids	Type and % of major solvents
9(a)	(R-1) Spraying	Lacquer	75	45	Lacquer
					Thinner 55
9(c)	(R-1) Spraying	Black Enamel	30	45	Toluene 55
		Epoxy Cement	10	55	Toluene 55
		Varnish	14	45	Toluene 55
9(d)	(R-1) Spraying	Enamel	10	40	Butyl
					Alcohol 30
					Solvesso 30

Negl

3. Type<sup>3</sup> and amount of thinner used for dilution and cleaning not included  
above  
Type Lacquer Thinner Amount 221  
Toluene Amount 15 Gal /yr  
Type Butyl Alcohol Amount 5 Gal /yr

4. Please complete Section V, page 8.

<sup>1</sup>A source is an individual or similar pieces of equipment such as spray booths, tanks, dryers, etc. It should correspond to the Source Number on page 8. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions report" (Form 158-R75).

<sup>2</sup>Paint, varnish, shellac, lacquer, enamel, etc.

<sup>3</sup>See Air

1. Indicate material being coated Misc. Metals, Micarta, Phenolic,  
etc.

2. Type and amount of coating used:

Source <sup>1</sup> Number	State Application Method: Spraying, Dipping, Roller, Flow, etc.	Type of Paint <sup>2</sup>	Amount Gals /yr	% solids	Type and % of major solvents	
	(R-1)				Xylene	55
9(b)	Spraying	Lacquer	3	45		
	"	Primer	3.4	45	Xylene	55
	"	Black Enamel	240	45	"	
	"	Brown Enamel	4	45	"	
	"	Acrylic Enamel	68	45	"	
	"	Gray Enamel	2	45	"	
	"	Gray Hammer Enamel	15	45	"	

3. Type<sup>3</sup> and amount of thinner used for dilution and cleaning, not included  
 above  
 Type Xylene Amount 88 Gal /yr  
 Type \_\_\_\_\_ Amount \_\_\_\_\_ Gal /yr

4. Please complete Section V, page 8.

<sup>1</sup>A source is an individual or similar pieces of equipment such as spray booths, tanks, dryers, etc. It should correspond to the Source Number on page 3. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions Report" (Form 158-R75).

<sup>2</sup>Paint, varnish, enamel, lacquer, enamel, etc.

<sup>3</sup>See Appendix

### III - C. PRINTING

- (1) Material being coated \_\_\_\_\_
- (2) Type of printing process: \_\_\_\_\_

Source Number <sup>1</sup>	State Printing Process: Letterpress, Flexographic, Lithographic, Gravure, Screen, etc.	Type of Ink <sup>2</sup>	Amount (lb/yr)	Type <sup>3</sup> and amount of solvent

- (3) Type<sup>3</sup> and amount of solvent used for dilution and cleaning not included above:
- Type \_\_\_\_\_ Amount \_\_\_\_\_ Gal /yr
- Type \_\_\_\_\_ Amount \_\_\_\_\_ Gal /yr

(4) Please complete Section V, p. 8; use same Source Number.

- <sup>1</sup> A source is an individual or similar printing machines, dryers, etc. It should correspond to the Source Number on page 8. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions Report" (Form 156-R75).
- <sup>2</sup> solvent based, oil based, lacquer-type, etc.
- <sup>3</sup> See Attachment 1.

**III- D. MISCELLANEOUS SURFACE COATING APPLICATION**  
**(Adhesives, Paper, Leather, Film, Glass, etc.)**

- (1) Material(s) being coated Fiberglas
- (2) Type of coating process:

Source Number <sup>1</sup>	State Coating Process: Spray, Flow, Dip, Roller, Brush, etc.	Type of Coating <sup>2</sup>	Amount of Coating (Gal/yr)	Type and % of Major Solvents in Coating
				Lac. Thinner 60
10	Dip - Clearseal	Barrier	19.4	

- (3) Type and additional amount of solvent used for dilution and cleaning not included above:

Type \_\_\_\_\_ Amount \_\_\_\_\_ Gal/yr

Type \_\_\_\_\_ Amount \_\_\_\_\_ Gal/yr

- (4) Please complete Section V, page 8; use the same Source Number.

1. Please do not include equipment for release of equipment using surface coating. It should be included in the Source Number of the C. If applicable it should also be included in previously reported source in Air Pollution Inventory Report.

2. Please do not include equipment for painting, rolling, etc., in this section.

#### IV - MANUFACTURING INDUSTRIES

## 1) Brief Description of Process Cleaning Printed Circuit Screens

[illegible]

2) Please complete Section V, page 8; use same Source Number.

<sup>1</sup> A source is an individual or similar pieces of equipment processing organic materials. It should correspond to the Source Number on page 8. If applicable, it should also correspond to previously reported sources in "Air Pollution Emissions Report" (Form 158-R75).

2. Heater, reactor, mixing tank, etc.

<sup>1</sup> Paint, varnish, shellac, lacquer, enamel, primer, adhesive, ink, other (specify).

<sup>4</sup> See Attachment 1.

V - CONTROL AND STACK INFORMATION

	(1) Contaminant	(2) %	(3) Quantity (Gals/yr)	(4) Potential Emissions (Tons/yr.)	(5) Organic Control Equipment	(6) Design Efficiency of Control Equipment	(7) Operating Efficiency of Control Equipment	(8) Date of Instal- lation	(9) Stack Data				
									Height (ft)	Inside Dia (ft)	Temp (°F)	Flow rate (1000 gpm)	
Steam Boiler	Sulphur	0.3	6,000#	3	None	-	-	-	140	5	400	2,000	-
(a) D-B Spray Booth	Xylene	50	205	0.77	None	-	-	-	-	-	-	-	60
(b) D-B Spray Booth	Xylene	70	10.5	0.04	None	-	-	-	-	-	-	-	Same
H-1 Spray Booth	Xylene	55	2,058	7.4	"	-	-	-	-	-	-	-	60
	Lac. Thin.	100	250	0.94	"	-	-	-	-	-	-	-	Same
F-3 Spray Booth	" "	55	260	0.96	"	-	-	-	-	-	-	-	60
Spray Booth	Xylene	55	120	0.45	"	-	-	-	-	-	-	-	60
I-3 Dip-Vinyl	Acetone	40	260	0.97	"	-	-	-	-	-	-	-	40
	Toluene	40	260	0.97	"	-	-	-	-	-	-	-	Same

Refer to the last section on page 9.

Additional instructions for this section follow.



## V - CONTROL AND STACK INFORMATION

845990133

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)				(12)
	Contaminant	%	Quantity	Potential Emissions	Organic Control Equipment	Design Efficiency of Control Equipment	Operating Efficiency of Control Equipment	Date of Installation	Stack Data	Height (ft)	Inside Dia (ft)	Temp (F°)	Wind Speed (ft/min)	Height (ft)	
F-3 Dip-Silicone	Methyl-Cellosolve	51	108	0.45	None	-	-	-	-	-	-	-	-	60	
F-3 Dip-Varnish	Mineral Spirits	50	1495	5.6	"	-	-	-	-	-	-	-	-	40	
F-1 Dip-Booth	Lac. Thin.	55	250	0.94	"	-	-	-	-	-	-	-	-	60	
a) " "	Xylene	55	270	0.98	"	-	-	-	-	-	-	-	-	Same	
c) " "	Toluene	55	46	0.17	"	-	-	-	-	-	-	-	-	Same	
d) " "	Butyl Alcohol	30	8	0.03	"	-	-	-	-	-	-	-	-	Same	
F-3 Dip-Clearseal	Lac. Thin.	60	23	0.08	"	-	-	-	-	-	-	-	-	40	
F-3 Spray Cleaning	Lac. Thin.	100	30	0.12	"	-	-	-	-	-	-	-	-	40	
F-1 Degreaser	Trichlor	100	1650	8.16	"	-	-	-	-	-	-	-	-	60	
01 " "	"	100	3120	14.8	"	-	-	-	-	-	-	-	-	60	
11 " "	"	100	2500	12.3	"	-	-	-	-	-	-	-	-	60	
11 Disc.	"	100	1200	5.94	"	-	-	-	-	-	-	-	-	60	

Complete the last section on page 9.

Special instructions for this section follow.

1. Each piece of equipment that emits organic substances or to a number of sections that are vented to a common stack. The source number should correspond to the sections pre-  
 2. Each process or operation from which organic substances are emitted. For example, dry cleaner, spray tank, spray booth, reactor, etc. If more than one unit is emitting to a common stack, specify  
 3. Section 1, specify the primary air contaminants emitted by complete name. Do not abbreviate or  
 4. Percentage of the total solvent mixture put into the process, which is represented by each  
 5. Total quantity in gallons of the total solvent mixture.  
 6. Report the emission rate potential in tons per year.  
 7. Report the organic substance control method used such as after burners, scrubbers, carbon adsorption,  
 8. Report the design efficiency.  
 9. Report the approximate present operating efficiency.  
 10. Report the installation date of control equipment.

11. Organic substances are emitted from a stack, provide height, diameter, temperature and flow rate  
 12. Organic substances are not emitted from a stack, indicate height above ground level of release point.

VI - BULK SOLVENT STORAGE

A. Please complete the following information for each solvent:

- storage tank greater than 250 gallons capacity.

[illegible]

1. 4. 1941

changed TTY, closed TTY, return var time, address, etc.

## ATTACHMENT 1\*

## ORGANICS

	<u>Aromatic Acids and Esters</u>
19	All Aromatic Acids
20	All Aromatic Esters
	<u>Aromatic Halogen Compounds</u>
21	All Aromatic Halogens
	<u>Aromatic Nitrogen Compounds</u>
22	Aromatic Amines
23	Aromatic N Compounds
	<u>Aromatic Sulfur Compounds</u>
24	All Aromatic Sulfur Compounds
	<u>Miscellaneous</u>
25	All Other Aromatic Gases
	<u>ALIPHATIC ORGANICS</u>
	<u>Aliphatic Hydrocarbons</u>
26	Butane
27	Other Non-Butane Alkanes
28	Ethylene
29	Butene
30	Ethylene
31	Propylene
32	Other Alkenes
33	Other Aliphatic Hydrocarbons

	<u>Aliphatic Alcohols &amp; Ethers</u>
34	Methyl Alcohol (Methanol)
35	Ethyl Alcohol (Ethanol)
36	Isopropyl Alcohol
37	Isobutyl Alcohol
38	Other Aliphatic Alcohol
39	Diethyl Ether
40	Ethyl Ether
41	Other Aliphatic Ethers
	<u>Aliphatic Aldehydes &amp; Ketones</u>
42	Formaldehyde
43	Acetaldehyde
44	Acrolein
45	Other Aliphatic Aldehydes
46	Diethyl Ketone (Acetone)
47	Diethyl Ketone
48	Methyl Ethyl Ketone (MEK)
49	Methyl Butyl Ketone (Hexanone)
50	Methyl Isobutyl Ketone (Hexane, HIBK)
51	Other Aliphatic Ketones
	<u>Aliphatic Acids and Esters</u>
52	Formic Acid
53	Acetic Acid
54	Other Aliphatic Acids
55	Methyl Formate
56	Ethyl Formate

57	Other Formates
58	Isopropyl Acetate
59	Other Acetates
60	Other Aliphatic Esters
	<u>Aliphatic Halogen Compounds</u>
61	Methyl Chloride
62	Chloroform
63	Carbon Tetrachloride
64	Perchloroethylene
65	Trichloroethylene
66	Trichloroethylene
67	Phosgene
68	Vinyl Chloride
69	Other Aliphatic Chloride Compounds
70	Methyl Bromide
71	Vinyl Bromide
72	Other Aliphatic Bromides
73	Methyl Iodide
74	Other Aliphatic Iodides
75	Other Aliphatic Halogens
	<u>Aliphatic Nitrogen Compounds</u>
76	Hydrogen Cyanide
77	Cyanide Compounds REC
78	Aniline
79	Hydrozine
80	Methyl Amine
81	Other Aliphatic Amines
	<u>Aliphatic Sulfur Compounds</u>
82	Methyl Mercaptan
83	Ethyl Mercaptan
84	Carbon Disulfide

85	Butyl Mercaptan
86	Other Aliphatic Mercaptans
87	Dimethyl Sulfide
88	Diethyl Disulfide
89	Diethyl Sulfide
90	Other Aliphatic Sulfide
91	Other Aliphatic Sulfur Compounds
	<u>Miscellaneous Organic Compounds</u>
92	Gasoline
93	Kerosene
94	Paint Thinner
95	Organic Solvents
96	Sulfonic Acid
97	Non-Aromatic Fluorous Organic Compounds
98	Radioactive Organics
99	Miscellaneous Organics

\* May be used in place of name of compound.



From : Newark R-I Division  
WIN : 326-2478  
Date : October 30, 1979  
Subject:

B. A. Kerns, Manager  
Environmental Control Construction Technology  
(W) Building, Room 1601  
Pittsburgh, PA

cc: W. J. Schmidt, Manager of Quality Assurance, C3

Thank you for forwarding to me copies of some of the pages of Environmental Protection Agency Regulations on Oil Pollution Prevention.

We have a number of oil filled transformers, none over 330 gallons each, but in total, over 1320 gallons, located in several vaults in the basement of our building. We also have buried a 30,000 gallon and a 550 gallon fuel oil tank. Based on the recommendation given us by the (W) review team that visited us recently, we are not preparing an SPCC plan.

Your comments will be welcome.

*PSSafran*

Peter S. Safran  
Mfg. Engineer/Wks. Engrg.

PSS/dlp

# WESTINGHOUSE ENVIRONMENTAL CONTROL SURVEY

Location of Plant (City, County, State) Newark  
Essex, NJ

Survey Prepared By W. T. Duck Date 6/9/80

Products Relays & Instruments

## Normal Plant Operation

A. Circle one: 1 (2) 3 Shifts Per Day

B. Circle one: (5) 6 7 Days Per Week

C. Number of employees 400

## I. WATER SURVEY

### A. Water Supply

1. Total incoming water 3,006,000 gallons per week.

2. Source of water - circle one or more:

River

Private Well

Municipal Water Supply

Other (Specify)

B. Water Usage (Gallons per week or percentages of total incoming water supply. If percentages are used, total should be 100%.)

1. Domestic (drinking, sanitary, food preparation) 22% 672,000

2. Cooling 26% 774,000

3. Process 14% 435,600

4. Other (Examples: boilers - landscape) \_\_\_\_\_

Boilers 2% 40,230

\*Well water overflow 36% 1,084,000

5. Does incoming process water require additional treatment? No

\*Well water tank overflow returns to well.

## C. Cooling Water

1. Is cooling water recycled? Yes If yes, indicate processes for treatment prior to recycle. Cooling towers for air conditioners.\*

2. Volume treated per week. 3.6 x 106 gals.

3. Blowdown (gallons per week) 36,000

4. Disposal of blowdown -

Storm Sewer

Sanitary Sewer

Surface Watercourse

Other (Explain) Combination storm-sanitary city sewer

D. Liquid wastes from air pollution control devices (wet scrubbers, etc.)

1. Volume (gal. per day or shift) 1,000

2. Source Well Water

3. Analyses Micarta dust in waste water

## E. Water Conservation

1. Do you recycle any water? No

2. If so, specify source of recycled water by process \_\_\_\_\_

3. Volume of water recycled \_\_\_\_\_

4. Treatment of water previous to recycling \_\_\_\_\_

5. Analyses of water recycled after treatment \_\_\_\_\_

\*Dearborn 909 Briquettes - non-chromate.

F. Treatment of waste water prior to final discharge:

1. Volume (gallons per shift or day) None

2. Point of disposal: Circle one or more. If more than one, estimate percentage of volume for each.

Municipal Sewer      Surface Watercourse

Deepwell              Storm Drain

3. Please describe pretreatment or treatment facilities

None

G. Disposal of side streams (sludge, other solids; include solutions hauled away)

Material	Disposal	Quantity Per Week
Ferric Chloride		1 Drum/Year
	Licensed	
	Hauler	

H. Capital cost of treatment facilities (and year)

None to date

1. Annual operating costs None

2. Cost of hauling (annual) "

3. Cost of use of municipal systems (annual) "

4. Number of treatment personnel None

I. List regulatory agencies which now control discharge of liquid wastes and wastewaters.

Please attach copy of effluent standards you must meet.

Additional comments: (Please send us as much pertinent data as possible, including any reports you have made either internally or for regulating agencies. Please list any references you think would be useful in this audit, and name any individuals who could supply additional information.)

J. Manufacturing Processes - Complete a separate process sheet for each manufacturing process used. See attached examples.

# Manufacturing Process

Name Phosphating Steel

Description (List steps in process)

1. Electroclean
2. Rinse
3. Pre-Dip
4. Phosphate
5. Rinse, Hot
6. Rinse, Chromic
7. Dry
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

Process production rate (average weekly production by unit: i.e. pounds per week)

4000 lb/wk.

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal 3 columns should total 100%		
			By percentage:		
			Hauled away	Flush	Consumed*
1. Clepo 43R (Alkaline Cleaner)	25 lb.	10 oz/gal.	0%	5%	95%
2. Rinse 2, 5	24,000 gal. per week		0%	95%	5%
3. Dibasic Phosphate	28 lb.	1 oz/gal.	0%	90%	10%
4. Bonderite 97	40 lb.	0.56 lb/gal	0%	10%	90%
5. Chromic Acid	82 g	.46 g/gal	0%	95%	5%
Phosphoric Acid	69 ml	.39 ml/gal			

\* Includes evaporation loss

845990140



# Manufacturing Process

Name Zinc Plate-Bonderize

Description (List steps in process)

1. Electroclean
2. Rinse
3. Acid
4. Rinse
5. Electrocyanide
6. Zinc Plate
7. Rinse
8. Predip
9. Bonderize
10. Rinse (Hot)
11. Rinse Chromic

Process production rate (average weekly production by unit: i.e. pounds per week)

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal		
			By percentage:	3 columns should total 100%	
			Hauled away	Flush	Consumed*
1. Clepo 43R	9 lb	10 oz/g	0	10%	90%
2. Rinses 2,4,7,10,11	68,750 g	--	0	100%	0
3. Hydrochloric Acid	8 gal	7N	0	30%	70%
5. Sodium Hydroxide	3 lb	2 oz/g	0	10%	90%
Sodium Cyanide	10 lb	7 oz/g			
6. Zinc Cyanide		1 oz/g	0	10%	90%
Sodium Cyanide	2 lb	2 oz/g			
Sodium Hydroxide	5 lb	10%/g			
8. Dibasic Phosphate	28 lb	1 oz/g	0	90%	10%
9. Bonderite 97	40 lb	0.56 lb/g	0	10%	90%

\*Includes evaporation loss

845990141

Manufacturing Process:

Name Nickel Plating Steel

Description (List steps in process)

1. Electroclean
2. Rinse
3. Acid
4. Rinse
5. Electrocyanide
6. Rinse
7. Dilute Acid
8. Nickel Plate
9. Rinse Cold
10. Rinse Hot
11. Dry

Process production rate (average weekly production by unit: i.e. pounds per week)

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal 3 columns should total 100%		
			By percentage: Hauled away	Flush	Consumed*
1. Clepo 43R	9 lb	10 oz/g	0	10%	90%
2. Rinses 2,4,6,9	55,000 gal.	--	0	100%	0
3. Hydrochloric Acid	8 gal	7N	0	30%	70%
5. Sodium Hydroxide	3 lb	2 oz/g	0	10%	90%
Sodium Cyanide	10 lb	7 oz/g			
7. Dilute Acid	1.5 gal	10%	0	10%	90%
8. Nickel Salt	12 lb	40 oz/g			
Nickel Chloride	3 lb	12 oz/g			
Boric Acid	1 lb	6.5 oz	0	10%	90%
Brightener BN		14 ml/g			
Brightener BQ		27 ml/g			
Brightener AS		9 ml/g			

\* Includes evaporation loss

845990142

# Manufacturing Process

Name Tin Plating Steel

Description (List steps in process)

1. Electroclean
2. Rinse
3. Acid
4. Rinse
5. Electrocyanide
6. Rinse
7. Tin Plate
8. Rinse
9. Dry
10. \_\_\_\_\_

Process production rate (average weekly production by unit: i.e. pounds per week)

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal 3 columns should total 100%		
			By percentage: Hauled away	Flush	Consumed*
1. Clepo 43R	9 lb	10 oz/g	0	10%	90%
2. Rinses 2,4,6,8	55,000 g/wk	--	0	100%	
3. Hydrochloric Acid	8 gal	7N	0	30%	70%
5. Sodium Hydroxide	3 lb	2 oz/g	0	10%	90%
Sodium Cyanide	10 lb	7 oz/g	0		
7. Sodium Stannate	3½ lb	14 oz/g	0	10%	90%
Sodium Hydroxide	4 oz	2 oz/g			
Sodium Acetate	8 oz	3 oz/g			

\* Includes evaporation loss

845990143

# Manufacturing Process

Name Copper Plating Steel

## Description (List steps in process)

1. Electroclean
2. Rinse
3. Acid
4. Rinse
5. Electrocyanide
6. Rinse
7. Copper Plate
8. Rinse Cold
9. Ebanol
10. Rinse Cold
11. Dry

Process production rate (average weekly production by unit: i.e. pounds per week)

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal		
			By percentage:	3 columns should total 100%	
			Hauled away	Flush	Consumed*
1. Clepo 43R	9 lb.	10 oz/g	0	10%	90%
2. Rinse 2,4,7,9	55,000 gal.	--	0	100%	--
3. Hydrochloric Acid	8 gal.	7N	0	30%	70%
5. Sodium Cyanide	10 lb	7 oz/g	0	10%	90%
Sodium Hydroxide	3 lb	2 oz/g			
6. Sodium Cyanide	23 lb	0.7 oz/g	0	10%	90%
Sodium Carbonate	--	5.0 oz/g			
Rochelle Salt	1 lb	5.0 oz/g			
8. Ebanol "C"	75 lb	1.3 lb/g	0	10%	90%

\*Includes evaporation loss

845990144

# Manufacturing Process

Name Bright Alloy Plating Steel

Description (List steps in process)

1. Electro Clean
2. Rinse
3. Acid
4. Rinse
5. Electrocyanide
6. Copper Plate
7. Rinse
8. Bright Alloy Plate
9. Rinse
10. Rinse
11. Dry

Process production rate (average weekly production by unit: i.e. pounds per week)

Chemicals used (by steps above)	Quantity (used per week)	Concentration	Disposal 3 columns should total 100%		
			By percentage: Hauled away	Flush	Consumed*
1. Clepo 43R	9 lb.	10 oz/gal.	0	10%	90%
2. Rinse 2,4,7,9	55,000 gal. per week		0	100%	--
3. Hydrochloric Acid	8 gal.	7M	0	30%	70%
5. Sodium Hydroxide	3 lb.	2 oz/gal.	0	10%	90%
Sodium Cyanide	10 lb.	7 oz/gal.			
6. Sodium Cyanide	23 lb.	0.7 oz/gal.			
Sodium Carbonate	--	5.0/gal.	0	10%	90%
Woolfite salt	1 lb.	5.0/gal.			
7. Sodium Cyanide	23 lb.	2.50/gal.			
Copper Cyanide	5 lb.	0.35/gal.			
Zinc Oxide	2 oz.	0.20/gal.	0	10%	90%
Sodium Stannate	1 lb.	0.22/gal.			
Soda Ash	--	4.00/gal.			
Sodium Hydroxide	1 lb.	0.42/gal.			

\*Includes evaporation loss

845990145

4)

Manufacturing Process (Example)

Name Chemical cleaning - aluminum

Description (Steps in process)

1. Degrease
2. Alkaline clean
3. Rinse
4. Deoxidize
5. Alodine
6. Rinse
7. Hot deionized rinse

Process production rate (average weekly production)

5000 lbs. per week.

Chemicals used (by steps above)	Quantity	Concentration	By percentage:	Disposal 3 columns must total 100%	
			Hauled away	Flush	Consumed*
1. Trichloroethane	400 gal per wk.	100%	5%	0%	95%
2. Altrax 1097 (alkaline cleaner)	200 lbs.	8 oz. per gal.	98%	2%	0%
3, 6, 7 Rinse	50000 gal. per week		0%	95%	5%
4. Deoxidizer (proprietary)	200 lbs.	16 oz. per gal.	99%	1%	0%
5. Alodine 1200 (proprietary)	100 lbs.	1-1/2 oz. per gal.	95%	1%	4%

\*Includes evaporation loss

Type of waste treatment at process site

Bisulfite and caustic soda added to rinse waters to convert hexavalent chrome to tri-valent chrome and control pH

Monitoring and chemical analyses

pH recording meter

Periodic chemical analyses of grab samples

845990146

## II. AIR SURVEY

A. Number of Fuel Burning Units at plant. The total number of units in which fuel combustion for indirect heating occurs, either for space heat or industrial use 2 Boilers

B. Annual fuel usage. The total quantities of all fuels should be listed. If different grades of coal or fuel oil were used, they should be listed separately.

Fuel Type	Quantity	(Units)	Sulfur Content (%)
#6 Fuel			
1. Oil	390,000	Gals.	0.3 Max.
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

C. Air Pollution Controls. Any controls removing particulate material or SO<sub>2</sub> from the flue gas streams should be specified in this item:

Equipment Type	Particulate Control Efficiency (%)	Amount of Combustion Capacity Controlled (%)
1. _____	None	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

D. Applicable air pollution control code (Federal, State, local or regional) State

U.S. Air Pollution Control Code

SO<sub>2</sub> by wt. ppm 0.33 max.  
 NO<sub>x</sub> ppm  
 CO ppm  
 Hydrocarbons ppm  
 Particulates grains/SCF  
 Odors ppm, micrograms/M<sup>3</sup> or scentometer No.

E. Name of air pollution control official in your State Controlled - Newark Field Office

1. ~~County~~ Bureau Air Pollution Control  
 Name Thomas Leonard, Supervisor  
 Address 1100 Raymond Blvd., Newark, NJ  
 Telephone No. 201-648-2075

2. State N.J. Dept. Envir. Protection  
 Name Geraldine English, Commissioner  
 Address John Fitch Plaza, Trenton, NJ  
 Telephone No. 609-292-5383

F. Have you received any complaint(s) from any of the public officials?

Yes \_\_\_\_\_ No X

G. If yes, state nature and disposal status of complaint(s). Attach separate sheet.

H. Have you received any complaint(s) from the general public?

Yes XX No \_\_\_\_\_

If yes, state nature and disposal status of complaint(s). Attach separate sheet.

If no, do you expect any in the future? Attach separate sheet.

\*On occasion, over the years apartment resident nearby has complained of boiler stack smoke. Routine immediate clean

845990147

### III. SOLID WASTE SURVEY

- A. Type of solid waste. The section should present a comprehensive display of the types and quantities of solid wastes generated by plant operations. Quantities reported should reflect average daily operating conditions.

Type	Quantity (Tons/Day)	Disposal	
		On-Site (%)	Off-Site (%)
1. Rock, sand, gravel, etc.	_____	_____	_____
2. Ash	_____	_____	_____
3. Collected Fly Ash	_____	_____	_____
4. Sludge	_____	_____	_____
5. Metal Scrap, Containers	_____	_____	_____
6. Paper Scrap, Containers	_____	_____	_____
7. Plastic	_____	_____	_____
8. Garbage	_____	_____	_____
9. Glass	_____	_____	_____
10. Other (specify) _____	_____	_____	_____

- B. Disposal Methods. All solid wastes produced must eventually be disposed of in some manner. The intent of this item is to indicate what disposal methods or techniques are currently in use at the plant site.

1. Total Off-Site Disposal (Tons/Day)	Cost (\$/Ton)
(a) Private Incineration _____ (%)	_____
(b) Private Landfill _____ (%)	_____
(c) Private Sanitary Landfill _____ (%)	_____

(d) Municipal Disposal \_\_\_\_\_ (%)

(e) By-Product Use Or Recovery \_\_\_\_\_ (%)

(f) Other (Specify) \_\_\_\_\_ (%)

#### 2. Total On-Site Disposal (Tons/Day)

(a) Incineration\* \_\_\_\_\_ (%)

(b) Landfill \_\_\_\_\_ (%)

(c) Other (Specify) \_\_\_\_\_ (%)

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*On-Site incineration, while providing a solution to a solid waste problem, may create an air pollution situation.

### IV. NOISE SURVEY

- A. Objective Noise Measurements. Information concerning objective sound level measurements is desired.

1. Have environmental noise measurements been made? Yes ☒ No \_\_\_\_\_

- If Yes (a) Date of last measurement 1978
- (b) Organization or group conducting tests Industrial Hygiene
- (c) Type of equipment used \_\_\_\_\_
- (d) Maximum Boundary-Line Sound Levels (dB) \_\_\_\_\_
- (e) Report of tests: Enclosed \_\_\_\_\_ Available \_\_\_\_\_ Unavailable ☒

- B. Complaints of Excessive Noise. In the absence of objective environmental criteria relating to noise, complaints may be used in identifying and defining any potential problems. Parts (a) and (b) of this item refer to employee and community generated complaints, respectively.



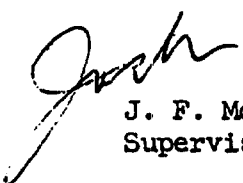


NEWARK RELAY-INSTRUMENT DIVISION

W. T. Buck,  
Sr Matl Proc Engineer 14

From Receiving Department  
WIN  
Date June 9, 1980  
Subject SOLID WASTE SURVEY  
1979

1. Ferric Chloride Etchant	Scientific Chem Processing Newark, N.J.	1 Drum/Yr
2. Freon TMC	Baron Blakeslee Co Bay Shore L.I., N.Y.	1 Drum/Yr
3. Lacquer Thinner	Scientific Chem Processing	1 Drum/Yr
4. Trichlor	Baron Blakeslee Co	8 Drums/Yr
5. Paint Solids	L. Pucillo & Sons Inc. State Hwy 46, Lodi, N.J.	1 Drum/ <del>2</del> 6/5 (SW 216-2/27/80)
6. *Cleaner-Benzine	Bill's Waste Oil Service Lyndhurst, N.J.	(NJ5WA-6629AA)
7. **Cleaner-Kerosene	" " " "	
8. Cutting Oil	" " " "	200 Gal/Mo
	* Mixed with Cutting Oil	
	** Mixed with Cutting Oil	
9. Non Ferrous Scrap	JEM Metal Co Cleveland, Ohio	20,000 Lbs/Mo
10. Ferrous Scrap	Rockwell Inc. 43 1st St., Passaic, N.J.	20,000 Lbs/Mo
11. Paper Scrap	P. Pepe Sons, Inc. 27 Malvern St., Newark, N.J.	3,500 Lbs/Mo
12. Garbage	L. Pucillo & Sons Inc.	40 CU YD/Wk

  
J. F. Morgan  
Supervisor Receiving

845990149

1. Are complaints received from workers regarding noise? Yes \_\_\_\_\_ No X

If Yes (a) Describe source(s) of noise referred to in complaints \_\_\_\_\_

(b) Has protective or remedial action been taken? Yes \_\_\_\_\_ No \_\_\_\_\_

2. Have persons in the area of this facility complained to plant or local authorities concerning noise from this plant?

Yes \_\_\_\_\_ No X

If Yes (a) Describe circumstances, action taken and deposition of this complaint \_\_\_\_\_

- C. Noise Producing Equipment. A general descriptive title should be used.

List below equipment capable of generating high sound levels.

Type Of Equipment	Number	Hours Operated/Shift
1. <u>Punch Press</u>	_____	_____
2. <u>Screw Machine</u>	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## V. RADIOACTIVE MATERIALS

### A. Use of Radioactive Materials:

1. Are radio isotopes at this facility? Yes \_\_\_\_\_ No X If No, do not complete remainder of this form.

2. Type of use. Define generally what use is made of the radioactive material; specifics are not necessary.

(a) Manufacturing \_\_\_\_\_

(b) Testing \_\_\_\_\_

(c) Research \_\_\_\_\_

(d) Other \_\_\_\_\_ (Specify) \_\_\_\_\_

### B. Individual Responsible for Control of the Radioactive Materials:

1. Name: \_\_\_\_\_

2. Title: \_\_\_\_\_

3. Organization: \_\_\_\_\_

4. Area Code/Phone/Extension: \_\_\_\_\_

### C. Type and Quantities of Material Utilized:

1. Average quantity of radio isotopes on hand during 1970 \_\_\_\_\_ (Curies, C)

2. Isotopic composition of the above. Chemical symbol and atomic weight are sufficient; i.e.,  $^{131}\text{I}$ ,  $\text{Sr}^{90}$ ,  $\text{U}^{235}$ . Quantities may be expressed in curies or microcuries, whichever is more convenient.

(a) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(b) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(c) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

(d) Isotope \_\_\_\_\_ Quantity \_\_\_\_\_ (c)

3. Amount of radioactive material in sealed sources \_\_\_\_\_ (c). (Radio isotopes in this form are not dangerous from an environmental contamination standpoint.)

D. Removal or release of radioactive material:

1. Quantity of material leaving plant (1970) (c) \_\_\_\_\_

2. Specific isotopes involved. This item should be filled in as fully as possible including the quantities associated with each type of release.

<u>Radioisotope</u>	<u>Incorporated In Product (c)</u>	<u>Release To Environment (c)</u>
(a) _____	_____	_____
(b) _____	_____	_____
(c) _____	_____	_____
(d) _____	_____	_____
(e) _____	_____	_____

3. Amount of Radioactive Material accidentally released 1970 \_\_\_\_\_. Any substantial accidental release should be fully documented in an attachment.

E. Form of Release to Environment:

1. Amount of radioactive materials given special handling disposal 1970 (c) \_\_\_\_\_

2. Conditions of release to the air.

<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity Of (uc/m<sup>3</sup>)</u>	<u>Type Release*</u>
(a) _____	_____	_____	_____	_____

(b) \_\_\_\_\_

(c) \_\_\_\_\_

3. Conditions of release to the water:

<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity Of (uc/l)</u>	<u>Type Release*</u>
(a) _____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____
(c) _____	_____	_____	_____	_____

4. Conditions of release in solid waste:

<u>Radioisotope</u>	<u>Chemical Species</u>	<u>Quantity (c)</u>	<u>Specific Activity (uc/lb)</u>	<u>Special Handling</u>
(a) _____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____
(c) _____	_____	_____	_____	_____

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*Continuous, Intermittent, Accidental

TO: Charles A. Berger  
Manager, Personnel Relations  
Newark, NJ

cc: Howard Stewart  
Supervisor, Personnel Relations  
Newark, NJ

INDUSTRIAL HYGIENE AUDIT REPORT

OF

NEWARK, NJ

ON

JULY 13, 1981

Conducted and Reported by:

Diane Whittier  
Industrial Hygiene Engineer  
Corporate Industrial Hygiene  
R&D Center - 401-3X9  
1310 Beulah Road  
Pittsburgh, PA 15235

845990152

### SUMMARY

On July 13, 1981, a Corporate Industrial Hygiene Audit was performed at the Newark, NJ facility by Diane Whittier, an Industrial Hygiene Engineer.

The audit included a review of plant health and safety programs, written procedures, and a walk-through survey of most of the plant. The areas surveyed included Sections: N-1, I-1, R-1, I-2, F-2, C-4 and O-1.

Even though many operations are being moved to the Florida facility, it is still very important to maintain an active industrial hygiene program at the Newark plant. The audit indicated that numerous employees are being exposed to toxic chemicals and unsafe hazards. It is Westinghouse policy to comply with local and federal regulations concerning occupational health and safety [Management Directive (MD-S05), November, 1978]; but the Newark facility is in violation of several federal OSHA standards. The facility is also not following many policies and procedures which have been recommended by (W) Corporate Industrial Hygiene. These violations are detailed in the following report. Non-compliance not only endangers the health and safety of the employees who work at the Newark plant, it also opens the door for OSHA citations and fines such as the one given to the (W) Lester, PA plant last year. In addition unsafe working conditions can increase workmen's compensation costs and legal suits filed against the Corporation and its management.

## I. INTRODUCTION

### A. Purpose

An industrial hygiene audit was performed at the Newark, NJ facility of the Relay Instrument Division on July 13, 1981. The audit was done by Diane Whittier, a Corporate Industrial Hygiene Engineer. Wayne Bickerstaff, Manager of Corporate Industrial Hygiene, had recommended that the audit be performed.

### B. Description

The Newark facility manufactures parts of relay instruments. The plant, which dates back to 1893, covers a whole city block and is four stories high. The plant population has decreased in recent years to the present number of about 500 total employees. This includes 351 hourly workers on day shift and 20 hourly workers on the afternoon shift. The remainder are salaried employees.

The medical facility at Newark employs one doctor on a part time basis, 2 hours per day, 3 days a week, and one full-time nurse.

During pre-employment physicals, audiometric examinations have been given for the past two years. Otherwise, the pre-employment physical consists of a basic physical exam and a medical history. Only those employees who work in high noise areas receive periodic exams after the initial exam. Recent health complaints include: smell, difficulty breathing, and drowsiness in the plating area; dermatitis on the epoxy workers; and noise.

Newark had no site safety policy committee or safety observer program at the time of the audit. Members of management meet only in the event of a problem. The only existing industrial hygiene program is a partial one on hearing conservation. Ear protection is available if the employees request it, and as mentioned above, audiometric examinations are performed yearly on those who work in recognized high noise areas. There are no programs for labeling, respirators or personnel air monitoring. Ventilation measurements are made on a periodic basis.

The last OSHA visit was in December, 1980. There was a citation involving lack of guarding on belts and electrical connections.

Approximately 60% of the materials used at the Newark facility are covered by the (W) Number System. Material Safety Data Sheets are received and maintained on materials purchased. The purchasing department requests suppliers to label containers of hazardous materials with (W) material numbers, but the plant survey showed that this practice is not always carried out.

Even though the site has the following equipment: a sound level meter, a junior velometer, a noise dosimeter, a Universal Test Kit, a high volume pump and a low volume pump; there has been no personal or area air sampling conducted at the plant since 1978. There is also no initial or periodic training given to employees who handle hazardous material.

## II. SURVEY - OBSERVATIONS

Since many operations are moving to the Florida plant, this survey covers areas of the plant which are remaining in Newark.

### A. Section N1

This area contained an automatic degreaser, punch presses, a bright dip operation and a spray paint booth.

The automatic vapor degreaser was equipped with an efficient slot ventilation system. The tank, which contained trichloroethylene, was not labeled as to its contents or hazards. Since it was automatic, there would be little contact with the tank except during maintenance or repair.

The large punch press (Minster Automatic Press) operated at sound levels of 94-95 dBA measured in the general area. Only a few of the employees wear ear protection, since the hearing program is on a voluntary basis.

The bright dip operation is automatic. The operator loads the pieces to be dipped in an area away from the tanks. The tanks are well ventilated. There is a full faceshield available for use if the operator has to go into the dip area for any reason. Nearby is an eye bath but no emergency shower. The tanks are not labeled as to contents or hazards. The paint operation is sprayed into a waterfall ventilation system. There was one open unlabeled cleaning tank containing a solvent in the area. Otherwise, safety cans are used but they are not labeled. The solvents used in this area include xylene, toluene and alcohol. The black enamel used in the operation is (W) M32213CU. The drums which are ordered from PPG are not labeled with the (W) material number.

### B. Section I-1

This was the plating department. The materials in use were hydrochloric, nitric and sulfuric acids. Caustic materials were also in use. Three eyewash fountains and showers were in the room. When they were turned on, the water which came out was very dirty and rusty. There were several signs in the area stating: "Goggles must be worn" but no one in the plating area was wearing goggles. The ventilation over the tanks was efficient. The tanks were not



labeled as to content or hazard, but there were a few signs around stating "Caution" or "Danger."

C. Section R-1

This room contained a spray painting operation which was performed in a three-sided booth with waterfall ventilation. The materials used were an assortment of paints and solvents. The major solvents were xylene, toluene, lacquer thinner, mineral spirits and acetone.

D. Section I-2

This department was a machining area. Cutting oils were in use here, but there were no complaints of dermatitis. Noise did not seem to be a problem in this department.

E. Section F-2

An assortment of automatic screw machines and turret lathes were used in this area. The noise levels in the general area were around 92-93 dBA. No engineering controls were evident and ear protection was on a voluntary basis.

F. Section C-4

Ten different epoxies are used in the coil winding operations. There have been some cases of dermatitis among these employees. There is also a small amount of hand soldering performed in this area.

G. Section O-1

There is a large degreasing operation in this area. The employees were not aware of what chemical they are working with. There was no labeling of contents or hazards on the tank which contained trichloroethylene.

### III. RECOMMENDATIONS

#### A. Section N-1.

Since trichloroethylene (TCE) is considered a highly toxic chemical and a carcinogen in mice, its use should be closely monitored. All employees who work with the degreasing operation should be trained as to the hazards of TCE and how to handle it. The tank should be labeled as to its contents and hazards. See (W) Safe Practice Data Sheet T-4. These employees should have personal air samples taken while they are working in the area. The training and the air monitoring should be repeated on an annual basis and the records must be maintained for at least 5 and 20 years, respectively. All persons required to handle TCE must be provided with gloves which are impervious to TCE. Refer to OSHA Standard CFR 1910.94(d)(9) regarding training and personal protective clothing. (W) Safe Practice Data Sheet T-4 can be used for training purposes. The air samples taken on individuals working with TCE (or any other toxic material) document the extent of their exposures or non-exposure as is usually the case.

All employees working in punch press areas of sound levels greater than 85 dBA should be monitored with personal noise dosimeters on an annual basis and the records must be maintained. In addition, all employees who are exposed to sound levels greater than 90 dBA for an 8-hour shift must have annual audiometric examinations in order to document any hearing loss while employed at Westinghouse. The employees who are exposed to levels over 90 dBA must wear hearing protection until engineering or administrative controls can bring the sound levels down to acceptable levels. Note that personal ear protection is to be used only as a temporary measure. Refer to OSHA Standard CFR 1910.96 and also to the amendment of the noise standard which should be out by September 1, 1981.

The tanks in the bright dip operation should be labeled as to contents and hazards. Employees must receive pre-employment and annual training regarding the use and handling of caustic materials. An emergency shower must be installed next to the eye wash fountain [CFR 1910.151(c)]. Both water supplies must be checked monthly or quarterly to insure that they contain clean water and are working properly. Reference: OSHA Standard CFR 1910:94(d)(9).

In this area, or any other area where there is a possibility of accidental release of hazardous concentrations of air contaminants, self-contained breathing apparatus should be stored for emergency use. Employees must be trained in the use of these respirators [CFR 1910:94(d)(9)(vi)] as per the plant's written Respirator Program [CFR 1910.134].

The painters in Section N-1 should be monitored with personal air samples for exposure to the various solvents (e.g. toluene, xylene) which they use. These air monitoring records must be maintained for a minimum of 20 years. The painters must receive pre-employment and annual training regarding the hazards of the materials they are working with. Refer to (W) Safe Practice Data Sheets (SPDS) P-1, T-2, X-1 and other SPDS on solvents for hazard evaluation and safe handling methods.

B. Section I-1

Employees working in this plating area must receive the same training as those in the bright dip area. They must all be issued the proper protective clothing and the wearing of tight fitting eye goggles or faceshields must be enforced. Emergency water supplies must be checked regularly to ensure that they contain clean water [CFR 1910:94(d)(9)]. All tanks should be labeled as to contents and hazards, and air samples should be taken on the employees who work in this section..

C. Section R-1

Personal air samples should be obtained from painters in order to document any exposure to solvents or lead if any lead based paints are used. Flammable materials must always be contained in safety cans and all material containers must be labeled.

D. Section I-2

If any machinists have dermatitis problems, recommend the use of a barrier cream and good personal hygiene, i.e. frequent hand washing.

E. Section F-2

The employees in this area must be monitored with noise dosimeters annually in order to estimate and record their noise exposure. Also, they should all have annual audiometric exams. In the meantime the employees must wear ear protection until the sound levels are brought down by engineering controls.

F. Section C-4

Barrier creams and/or protective gloves can be worn by epoxy workers in this area in order to prevent dermatitis. Employees who perform hand soldering must not eat, drink or smoke in this area because of possible exposure to lead by ingestion. Employees must be notified as to the hazards of lead intoxication (See SPDS L-2). It is unlikely that any employee will be exposed to lead by inhalation since soldering temperatures are so low that lead oxides are not formed. However, the lead standard (29 CFR 1910.1025) requires that personal air samples be taken on all lead operations. The results of these samples must be retained in the records.

G. Section O-1

As in Section N-1, training, labeling and monitoring must be done in this area where trichloroethylene is used.

#### IV. CONCLUSIONS

It is a policy of Westinghouse to "provide safe and healthful working conditions", "to maintain all facilities and equipment in accordance with recognized and accepted standards"; and "to reduce the use of.....procedures .....that expose employes to substances that are potentially toxic, flammable or radioactive." Each member of management is responsible for complying with these policies. [Management Directive (MD-S05), November 1978] To this end the Newark facility must establish an industrial hygiene program which will address this policy and also assure that OSHA standards are being met.

First, the person responsible for industrial hygiene must have a chemical inventory of all substances used in the Newark facility and maintain a file of the Material Safety Data Sheets obtained from suppliers. The next step is to determine which employes use which toxic substances. This task will be simplified if suppliers cooperate with the Purchasing Department's request to put the (W) M number on all containers of materials delivered to the plant. A personal air sampling and physical agent monitoring program must then be established in order to determine extent of exposure, if any, to each job classification in each area. The program must be an ongoing monitoring program, repeating air samples on an annual basis and maintaining these records.

Medical surveillance must then be based on exposure records. For example, those employes exposed to lead should have blood lead levels checked on a periodic basis. The medical records must be maintained indefinitely.

Another part of the plant's industrial hygiene program should be an ongoing training program for first line supervisors so they in turn can inform employes of the hazards associated with their particular job.

A site safety observer program should be set up. This program will assist the industrial hygiene/safety (IH&S) person to keep abreast of problems in the plant. For more information, contact the Corporate Safety Department.

A site safety policy committee consisting of the plant manager, personnel relations manager, industrial hygiene and safety person, operations managers, maintenance manager, materials and process manager(s), etc. must be established. This committee should meet monthly for the purpose of setting plant IH&S policy, establishing guidelines and discussing IH&S problems.

Plant programs which should be written, set up and enforced include: an eye protection program, a respiratory program, a hearing protection program, a safety shoe program, and so on.

It is recommended that the person(s) responsible for the industrial hygiene program at the Newark facility attend the Corporate Industrial Hygiene and Safety courses which are offered every year through the (W) Education Center. These courses will help the industrial hygiene and safety person to carry out his/her responsibility as defined by the Corporation and as defined by Federal law. The first course, #516, systematically details how to establish an effective Industrial Hygiene and Safety Program and Courses #517 and #518 train the Industrial Hygiene and Safety person how to recognize, evaluate and control the toxic or hazardous operations.

APPROVED BY:

---

C. W. Bickerstaff, Manager  
Corporate Industrial Hygiene  
9/11/81

ENVIRONMENTAL PROTECTION AGENCY  
GENERATOR ANNUAL HAZARDOUS WASTE REPORT

This report is for the calendar year ending December 31, 1981.

NJD004383485

02

G

WESTINGHOUSE ELECTRIC CORPORATION  
ATTN: MICHELINI JR C.J.  
95 ORANGE STREET  
NEWARK

NJ 07101

GENERAL INSTRUCTIONS: If you received a preprinted label attached to the mailing envelope in which this form was enclosed, affix it in the space provided. If any of the information on the label is incorrect, draw a line through it and provide the correct information in the appropriate section below. If the information is correct and complete, leave Sections I, II, and III below blank. If you did not receive a preprinted label, complete all sections. REFER TO THE SPECIFIC INSTRUCTIONS CONTAINED IN THIS BOOKLET BEFORE COMPLETING THIS FORM. The information requested in this report is required by law (Section 3002 of the Resource Conservation Recovery Act).

Please print/type with elite type (12 characters per inch)

## I. GENERATOR'S EPA I.D. NUMBER

T/A C

N J D 0 0 4 3 8 3 4 8 5 7 7  
1 2 13 14 15

## II. NAME OF INSTALLATION

WESTINGHOUSE ELECTRIC CORPORATION  
30 69

## III. INSTALLATION MAILING ADDRESS

3 9 5 O R A N G E S T R E E T  
15 16 45

Street or P.O. Box

N E W A R K N J 0 7 1 0 1  
15 16 41 42 47 51

City or Town

State Zip Code

## IV. LOCATION OF INSTALLATION (if different than section III above)

5 9 5 O R A N G E S T R E E T  
15 16 45

Street or Route number

N E W A R K N J 0 7 1 0 1  
15 16 41 42 47 51

City or Town

State Zip Code

## V. INSTALLATION CONTACT

M I C H E L I N I C . J .  
15 16 45

Name (last and first)

2 0 1 - 6 4 3 - 1 8 7 7  
46 55

Phone No. (area code &amp; no.)

## VI. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

C.J. MICHELINI, JR. PLANT MGR.

Print/Type Name

Title

Signature of Authorized Representative

Date Signed

12-21-82

## ENVIRONMENTAL PROTECTION AGENCY

## Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

Date rec'd: 12-9-82 Rec'd by: C.J. MICHELINI

## VII. GENERATOR'S EPA I.D. NO.

G N J D 0 0 4 3 8 3 4 8 5 1 1  
1 2 13 14 15

## IX. FACILITY'S EPA I.D. NO.

F N J D 0 4 8 8 1 0 2 7 9  
16 28

## VIII. FACILITY NAME (specify facility to which all wastes on this page were shipped)

BARON BLAKESLEE

## X. FACILITY ADDRESS

49 CENTRAL AVE.  
SO. KEARNY N.J.

## XI. TRANSPORTATION SERVICES USED (list the name and EPA identification numbers of all transporters whose services were used during 1981. This section to be completed only once. Do not repeat on supplemental sheets.)

NJD 048810279

## XII. WASTE IDENTIFICATION

Sequence #	Line	A. Description of Waste	B. DOT Hazard code	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
1	1	SPENT HALOGENATED SOLVENT USED IN DEGREASING	1 3	F 0 0 1	6 1 1 0	P
2	2	TRICHLOROETHYLENE				
3	3	SPENT HALOGENATED SOLVENT USED IN DEGREASING -	1 3	F 0 0 1	1 6 1 7	P
4	4	METHYLENE CHLORIDE				
5	5					
6	6					
7	7					
8	8					
9	9					
10	10					
11	11					
12	12					

## XIII. COMMENTS (enter information by section number—see instructions)



Department of Environmental Protection  
Division of Waste Management  
Bureau of Hazardous Waste Classification and Manifest

PRIVILEGED

NJD 004383485 NJT  
EPA ID number (If one was issued)

Westinghouse Electric Corporation 201 643-1877  
Company Name Phone Number

95 Orange Street  
Street Address

Newark Essex New Jersey 07101  
City County State Zip

Mail Address Street Address (If different)

City County State Zip

N 40° 44' 30" W 74° 11' 30"  
Latitude Longitude

201 643-6204  
Emergency Phone

Generator X Transporter Facility  
Company Type (Please check that which applied to your Company)

3825  
SIC Code

832/8016249

845990165

845990166

PRIVILEGED

GENERATOR'S ANNUAL REPORT  
FOR YEAR OF 1983

1. GENERATOR'S NAME Westinghouse Electric Corporation 2. EPA ID NO. NJD004383485  
3. ADDRESS 95 Orange Street, Newark, NJ 07101 TELEPHONE 201 643-6204  
4. TRANSPORTER'S NAME CECOS International, Inc. 5. EPA ID NO. NYD080336241  
5. ADDRESS 1 Edgewater Plaza, Staten Island, NY 10305  
7. FACILITY'S NAME CECOS International, Inc. 8. EPA ID NO. NYD080336241  
9. ADDRESS 56th Street & Niagara Falls Blvd., Niagara Falls, NY 14303

10. MANIFEST NO	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
1. NY2964627	Waste Corrosive Solids N.O.S. Corrosive Material	55	1		D002	
2. "	Waste Flammable Solids N.O.S. Flammable Solids	830	1		D001	
3. "	Waste Flammable Liquid N.O.S. Flammable Liquid	220	1		D001	
4. "	Waste Corrosive Liquid N.O.S. Corrosive Material	55	1		D002	

832/8016250

• - PLACE AN "X" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

GENERATOR'S ANNUAL REPORT  
FOR YEAR OF 1983

845990167  
PRIVILEGED

1. GENERATOR'S NAME Westinghouse Electric Corporation 2. EPA ID NO. NJD004383485  
 3. ADDRESS 95 Orange Street, Newark, NJ 07101 TELEPHONE 201 643-6204  
 4. TRANSPORTER'S NAME CECOS International, Inc. 5. EPA ID NO NYD080336241  
 6. ADDRESS 1 Edgewater Plaza, Staten Island, NY 10305  
 7. FACILITY'S NAME CECOS International, Inc. 8. EPA ID NO NYD080336241  
 9. ADDRESS 56th Street & Niagara Falls Blvd., Niagara Falls, NY 04303

10. MANIFEST NO	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
1. NJ0160526	Waste Oxidizer Poison Solids N.O.S.	Oxidizer	165	1	D001	
2. "	Waste Corrosive Solid N.O.S.	Corrosive Material	500	1	D002	
3. "	Waste Cyanide Mixture Dry	Poison B	300	3	P030	
4. "	Waste Flammable Solid N.O.S.	Flammable Solid	110	1	D001	

232/8016251

\* - PLACE AN "\*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

GENERATOR'S ANNUAL REPORT  
FOR YEAR OF 1983

PRIVILEGED

845990168

1. GENERATOR'S NAME Westinghouse Electric Corporation 2. EPA ID NO. NJD004383485  
3. ADDRESS 95 Orange Street, Newark, NJ 07101 TELEPHONE 201 643-6204  
4. TRANSPORTER'S NAME Bill's Waste Oil Service 5. EPA ID NO NJD350011227  
5. ADDRESS 22 Idaho Street, Passaic, NJ 07055  
7. FACILITY'S NAME B&L Oil Corporation 8. EPA ID NO NJD064981988  
9. ADDRESS 472 Frelinghuysen Avenue, Newark, NJ 07114

10. MANIFEST NO	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
1. NJ0033830	Waste Oil N.O.S.	Combustible Liquid	300	1	X721	
2. NJ0033832	Waste Oil N.O.S.	Combustible Liquid	400	1	X721	
3. NJ0168847	Waste Oil N.O.S.	Combustible Liquid	300	1	X721	

832/8016252

• - PLACE AN "\*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

**PRIVILEGED**

BUREAU OF HAZARDOUS WASTE  
GENERATOR'S ANNUAL REPORT  
FOR YEAR OF 1983

1. GENERATOR'S NAME	Westinghouse Electric Corporation		2. EPA ID NO.	NJ0004383485	
3. ADDRESS	95 Orange Street, Newark, NJ 07101		TELEPHONE	201 643-6204	
4. TRANSPORTER'S NAME	Baron Blakeslee		5. EPA ID NO	NJ0048810279	
5. ADDRESS	49 Central Avenue, South Kearny, NJ 07032		8. EPA ID NO	NJ0048810279	
7. FACILITY'S NAME	Baron Blakeslee				
9. ADDRESS	49 Central Avenue, South Kearny, NJ 07032				
10. MANIFEST NO	DESCRIPTION OF WASTE	DOT HAZ. CLASS	QUANTITY	UNITS	EPA WASTE TYPE
NJ0168846	Waste Trichlor-ethylene Mixture	ORM-A	1097	1	F001
					REJECTED

832/8016253

PLACE AN "X" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

**Exhibit A**  
**Sewer & Easement Issues**

OLD DRAWINGS

NOTE

D: Forest  
present identification

SAMPLE POINT #4

SAMPLE POINT #5

LACKAWANNA

AVENUE

832/8016456

STREET

ORANGE

STREET

ORANGE

SAMPLE POINT #3

D-BUILDING

E-BUILDING

H-BUILDING

E-BUILDING

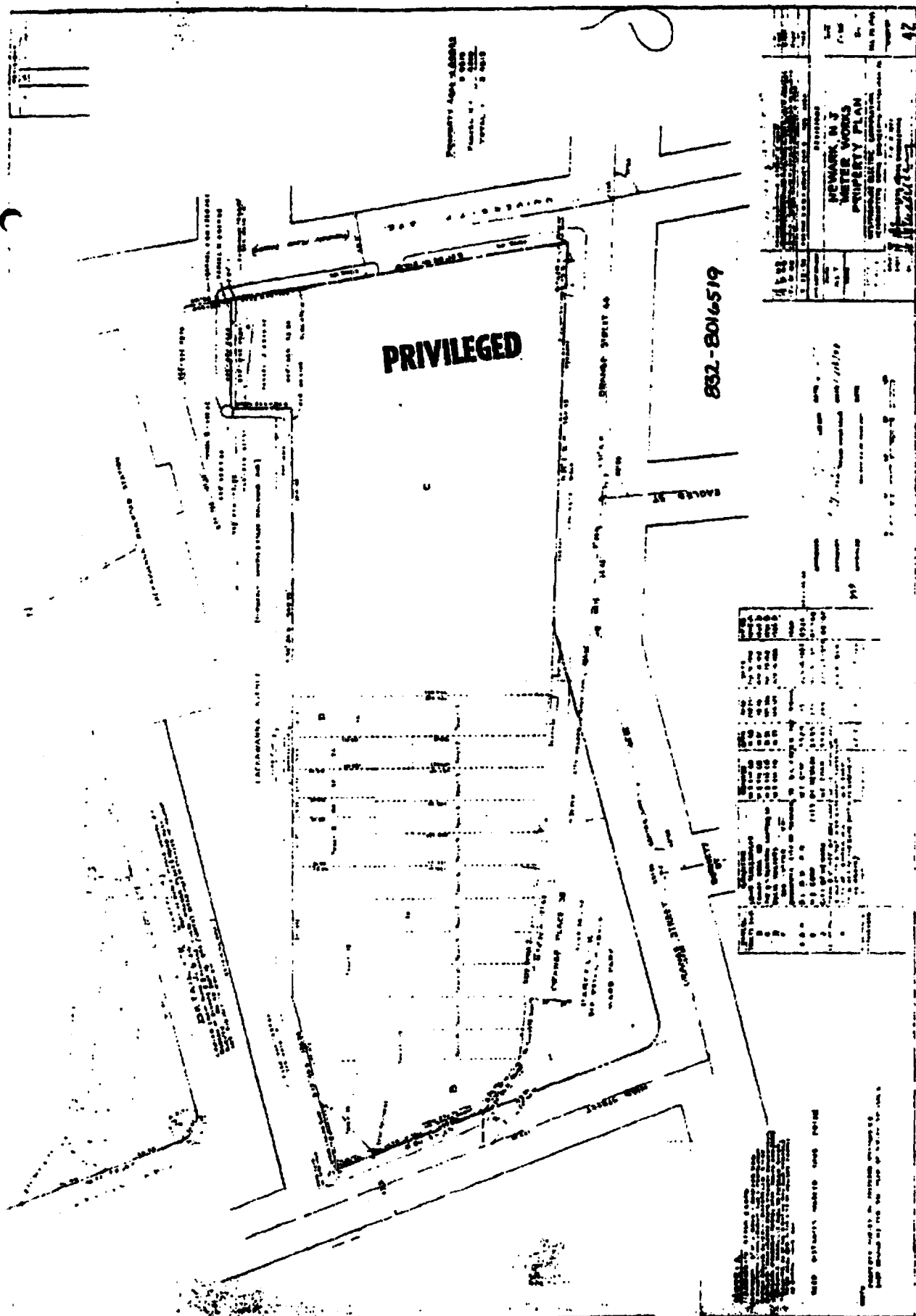
F-BUILDING

H-BUILDING

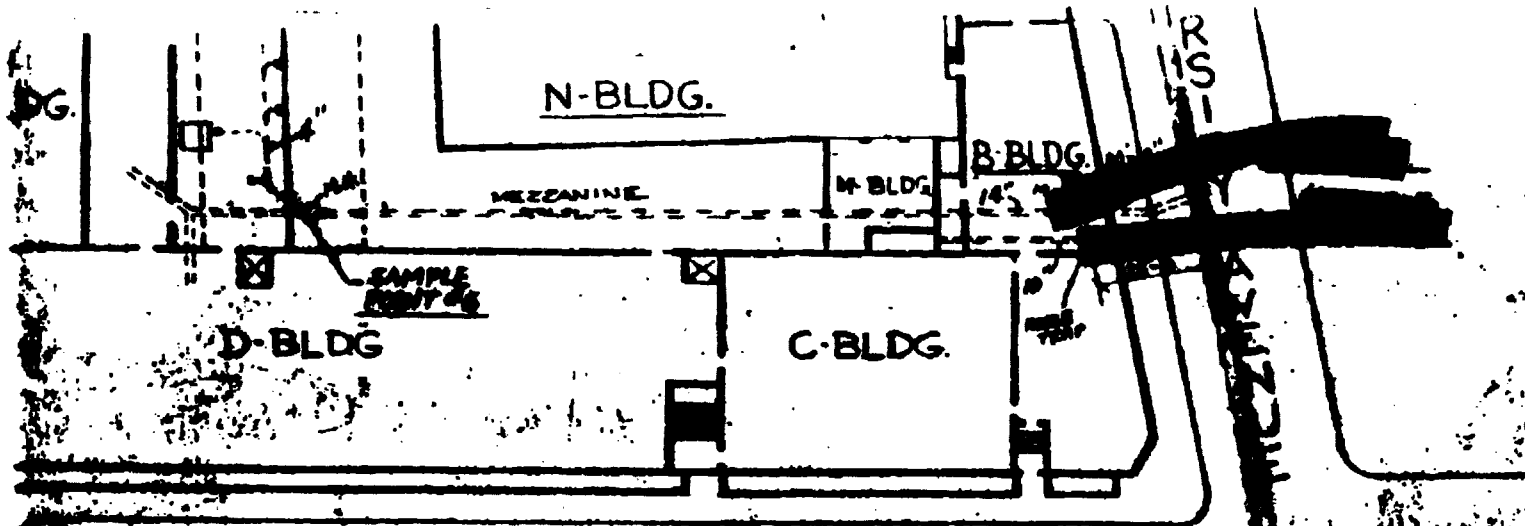
IGNORE

Trust and as ... hand of ...

W  
9  
TTT  
ORAF







832/8016462

RELAY-INSTRUMENT DIVISION

NAME	
ADDRESS	
CITY	
STATE	
ZIP	
TELEPHONE	

845990173

(32) 9016462 A

WESTINGHOUSE

ORANGE STREET

H-BLDG

R-BLDG

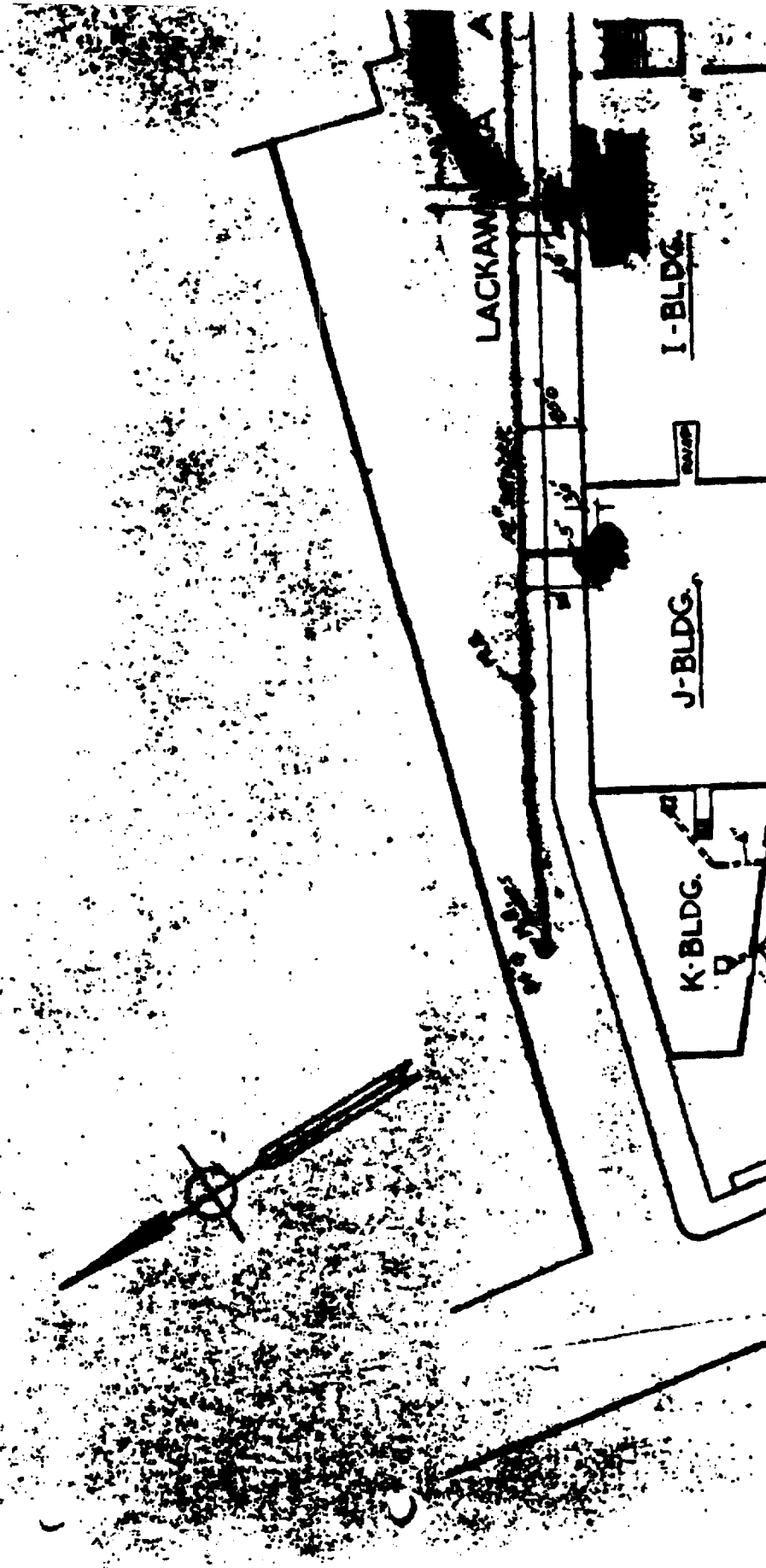
O-BLDG  
(2 floors)

L-BLDG

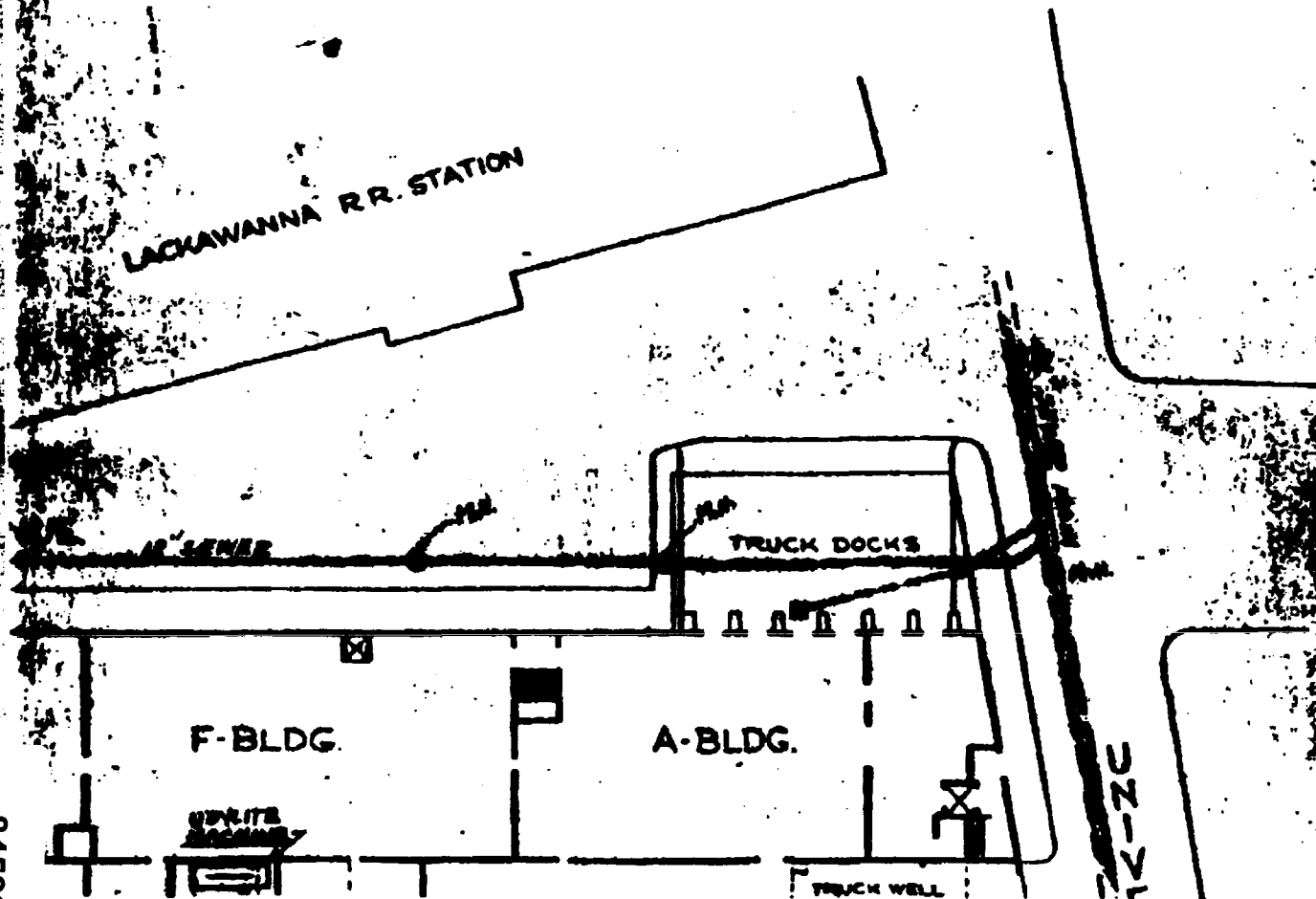
Savage Pond

E-1

932)8016462 B



832) 8016162 C



845990176

SEWERS AND DRAINS

ARTICLE III. USE OF PUBLIC SEWERS

Sec. 27.16 Discharging sewage, wastes, etc., into natural outlets prohibited; exception.

It shall be unlawful for any person to discharge into any natural outlet within the limits of the city any sanitary sewage, industrial wastes or other polluted waters, except where suitable treatment has been provided as approved by the engineer of the bureau of sewers of the city.

Sec. 27.17 Discharging storm water, etc., into sanitary sewers prohibited.

No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, sub-surface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer.

Sec. 27.18 Storm and other unpolluted drainage to be discharged through combined or storm sewers.

Storm and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers or to a natural outlet as approved by the engineer in charge of the bureau of sewers. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the engineer in charge of the bureau of sewers, to a storm sewer, combined sewer or a natural outlet.

Sec. 27.19 Enumeration of particular waters and wastes not to be discharged into public sewers.

Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes into any public sewer:

(a) Any Liquid or vapor having a temperature higher than 150° F.

(b) Any water or waste which may contain more than 125 parts per weight, of fat, oil or grease.

(c) Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.

(d) Any live steam or boiler blow offs.

(e) Any ashes, cinders, sand, mud, straw, shavings, metal, offal, dead animals, bulk garbage, refuse, meats, leaves, bones, glass, rags, feathers, tar, plastics, wood, paunch manure or any other solid or viscous substance.

(f) Any waters or wastes having a pH lower than 4.6 or higher than 9.6 or having any other corrosive property capable of causing damage or hazard to the sewer appurtenances and personnel of the bureau of sewers or any citizen.

(g) Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters.

(h) Any noxious or malodorous gas or substance capable of creating a public nuisance.

#### Sec. 27.20 Grease, oil and sand interceptors—Generally.

Grease, oil and sand interceptors shall be provided when, in the opinion of the engineer in charge of the bureau of sewers; they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand and other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the engineer in charge of the bureau of sewers and shall be so located by his direction as to be readily and easily accessible for cleaning and inspection.

Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which when bolted in place shall be gastight and watertight.

#### Sec. 27.21 Same—To be installed and maintained by owner.

Where installed, all grease, oil and sand interceptors shall be installed and maintained by the owner, at his expense, in continuously efficient operation at all times.

#### Sec. 27.22 Preliminary treatment facilities—Generally.

The admission into any public sewer of any waters or wastes having (a) a five day biochemical oxygen demand greater than 350 parts per million by weight, or (b) containing more than 400 parts per million by weight of suspended

solids or (c) containing any quantity of substances having the characteristics described in section 27.19 of this Revision shall be subject to the review and approval of the engineer of the bureau of sewers. Where necessary in the opinion of the engineer of the bureau of sewers the owner shall provide, at his expense, such preliminary treatment as may be necessary to (a) reduce the biochemical oxygen demand to 350 parts per million and the suspended solids to 400 parts per million by weight, or (b) reduce objectionable characteristics or constituents to within the maximum limits provided for in section 27.19 of this Revision, or (c) control the quantities and rates of discharge of such waters or wastes. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted to the engineer in charge of the bureau of sewers for his inspection and approval, and no construction of such facilities shall be commenced until such approval is obtained in writing.

#### Sec. 27.23 Same—To be maintained by owner at his expense.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation, by the owner at his expense.

#### Sec. 27.24 Control manhole may be required where house sewer carries industrial wastes.

When required by the engineer in charge of the bureau of sewers, the owner of any property served by a house sewer carrying industrial wastes shall install a suitable control manhole in the house sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the engineer. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

#### Sec. 27.25 Measurements, tests and analyses.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in sections 27.19 and 27.22 of this Revision shall be determined in accordance with standard methods for the examination of water and sewage, and shall be determined at the control manhole provided for in section 27.24 of this Revision or upon suitable samples taken at such control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the house sewer is connected.

Return to:

PASSAIC VALLEY SEWERAGE COMMISSIONERS

790 Broad Street

Newark, N. J. 07102

Date: 7/11/72

Plant Ref. No. 1DE0122

## WASTE EFFLUENT SURVEY

(For Industries Served by the Passaic Valley Sewerage Commissioners)

Plant Name: Westinghouse Electric Corp., Relay-Instrument Division

Address: 95 Orange Street, Newark, New Jersey Zip: 07101

Person and Title to whom any further inquiries should be directed:

S. C. Iannaccone, Manager Works Engineering

Phone No.: 465-2432

Number of Employees: 1400

Number of Working Days Per Week: 5

Number of Shifts Per Day: 1300 People 1st Shift, 98-2nd Shift, 2-3rd Shift

Area of Property: 3.45 Acres, or Sq. Ft.

Type of Industry and 4 digit U. S. Standard Industrial Classification No.: S.I.C. 36

Electrical Machinery and Equipment

Finished Product(s): Relays, Instruments, Supervisory Control

Average Production: 15,000, 20,000 units per month.

Raw Materials Used: Steel, plastics, copper, coating materials

Brief Description of Operations: Parts are fabricated in our press shop or machine shops,  
and assembled into completed units.

845990179

Water received in Gallons (Note: multiply cu. ft. x 7.48)

Purchased water in 1971 from: City of Newark

1st Quarter 24,262,876

2nd Quarter 26,809,068

3rd Quarter 23,535,072

4th Quarter 19,197,420

Total Purchased 1971: 93,804,436 Gals.

#### Well Water

1st Quarter 30,000,000

2nd Quarter 30,000,000

3rd Quarter 30,000,000

4th Quarter 30,000,000

Total well water received in 1971: 120,000,000

#### River Water

1st Quarter

2nd Quarter

3rd Quarter

4th Quarter

Total river water taken in in 1971: 0

TOTAL OF ALL WATER RECEIVED IN 1971: 213,804,436

#### Water Use in 1971:

Water to Product (include evaporated and lost water): 1,000,000

Water to Sanitary Sewer: 121,404,436

Water to ~~Storm Sewer~~ <sup>AND WELL</sup> ~~River or Ditch~~: Returned to earth 91,400,000

TOTAL WATER USE IN 1971: 121,404,436

Name of River, Stream, or Tributary, and location of storm sewer or ditch outlet to river, stream, or tributary: None



**(Note: Analyses should be based on a 24-hour composite sample)**

a) pH: 7.8                      b) Turbidity: less than 18 JTU

c) Temperature: 47-60°F d) Radioactive? Yes \_\_\_\_\_ No X

1) Total Solids 796 mg/L Volatile 172 mg/L Mineral 624 mg/L

2) Suspended Solids 20 mg/L Volatile 10.0 mg/L Mineral 10 mg/L

1) Floatable Oils 4 mg/L

2) Emulsified Oils ..... 4 mg/L

g) Chlorides ..... 190 mg/L

h) Chemical Oxygen Demand (C.O.D.): 656 mg/L

i) 5-day Bio-chemical Oxygen Demand (B.O.D.): 11.1 mg/L

j) Total organic carbon (T.O.C.): ..... 19.65 mg/L .....

k) **Metallic Ions**—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury, Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.)

copper	< 0.1 mg/L	Lead	< 0.3 mg/L	Zinc	0.59 mg/L
iron	< 0.1 mg/L	Mercury	0.0007 mg/L	Silver	< 0.1 mg/L
nickel	< 0.1 mg/L				

1) Toxic Material—Name and concentration e.g., cyanide salts, etc.): Bromides < 2.5 mg/L  
Cyanides 0.44 mg/L

m) Solvents Name and concentration: None

n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): None

o) Date and time span of sample 4 P.M. 4/18/72 9 P.M. 4/19/72

Explain hours, method of discharge of waste to Sanitary Sewer and peak rate of flow, e.g., (continuing for 8 hours per day, 5 days per week at 100 gal./day rate) (batch twice a day for 20 minutes at 100 gal./min.) (Continuous 24 hours steady or with peaks at 2 P.M., peak rate 3 M.G.D.) etc.

Large Plant tied in at six locations. results are composite of all lines. Most of flow is 5 days 8 A.M - 12 Midnight. Average flow 25,000 Gal/l. Peaks 9-10 A.M. & 1 - 3 P.M. 30,000 Gals/hr. Midnight to 8 A.M. 5,000 Gals./Hr.

Characteristics of Plant Discharge to Storm Sewer, River, or Ditch, after treatment if any.  
Indicate units of measure where applicable (e.g., Mg/l).

- a) pH: ..... b) Turbidity: .....  
c) Temperature: ..... d) Radioactive? Yes ..... No .....  
e) Solids Concentration:  
    1) Total Solids ..... Volatile ..... Mineral .....  
    2) Suspended Solids ..... Volatile ..... Mineral .....  
f) Oil and Grease Concentration:  
    1) Floatable Oils .....  
    2) Emulsified Oils .....  
g) Chlorides .....  
h) Chemical Oxygen Demand (C.O.D.): .....  
i) 5-day Bio-chemical Oxygen Demand (B.O.D.): .....  
j) Total Organic Carbon (T.O.C.): .....  
k) Metallic Ions—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury. Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.): .....  
.....  
.....  
l) Toxic Material—Name and concentration (e.g., cyanide salts, etc.): .....  
.....  
m) Solvents—Name and concentration: .....  
.....  
n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): .....  
.....  
o) Date and time span of sample: .....  
Do you pretreat any waste before discharge? .....  
If so, describe process and disposal of residue removed: .....  
.....  
.....

Certification of Laboratory doing sampling and making analyses shall be given. Procedures shall be those shown in the 13th edition of Standard Methods for the Examination of Water and Wastewater, where applicable. If no procedure is applicable, the laboratory is to describe method and procedure used in analyses.

Signature and title of person preparing report

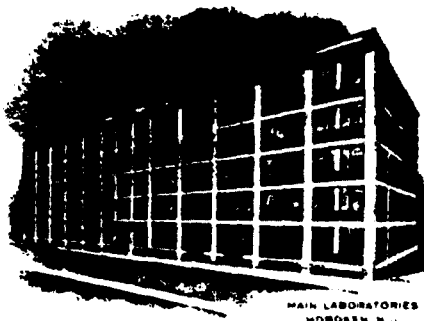
845990182

ESTABLISHED 1880



CABLE ADDRESS  
USTESTCO. HOBOKEN, N. J.

TELEPHONE  
201 792 2400



MAIN LABORATORIES  
HOBOKEN, N. J.

CHICAGO  
HARTFORD  
HOBOKEN  
LOS ANGELES  
MEMPHIS  
OMAHA  
READING  
TULSA

## UNITED STATES TESTING COMPANY INCORPORATED

MAIN LABORATORIES 1415 PARK AVENUE

HOBOKEN, N. J. 07030

July 17, 1972

Mr. Iannacone  
Westinghouse electric Corp.  
Plane & Orange St.  
Newark, New Jersey 07101

Dear Mr. Iannacone:

Per our recent conversation, we are enclosing the correctly identified result sheets, pages 3 and 4, to be placed in our report #67170 of June 12, 1972. Please disregard the identification of results on our original data sheets.

In reference to your question about the solvents and resins analyses, these analyses were not performed after preliminary investigations indicated there was not sufficient volumes of either present to be detectable.

Our chemist Boyd Fagan would also be willing to meet with some of your people to discuss the results we have supplied you with

We hope we have provided you with all the necessary information. Please do not hesitate to contact us if further information or clarification is necessary.

Yours truly,  
UNITED STATES TESTING CO. INC.

E. Rider  
Supervisor  
Environmental Sciences Division

845990183

# UNITED STATES TESTING COMPANY, INC.

## REPORT OF WATER AND WASTEWATER ANALYSIS

Page 4 of 4

Client: Westinghouse, Newark, N.J.

Report No.: 67170

Date: 5/2/64

Sample No.: 3 Description Composite of all 6 lines.

Sample No.:          Description         

TEST	SAMPLE NO.		TEST	SAMPLE NO.
	3	6		3
Acidity (as CaCO <sub>3</sub> )			Surfactants	
Alkalinity, Total (as CaCO <sub>3</sub> )			Aluminum	
Alkalinity			Antimony	
Hydroxide			Arsenic	
Carbonate			Beryllium	
Bicarbonate			Cadmium	
Cyanides	2.5		Calcium	
Total Organic Carbon	19.65		Chromium, Total	
Chemical Oxygen Demand (COD)	656.0		Chromium, Hexavalent	
Chlorides	190		Cobalt	
Chlorine Residual			Copper	<0.1
Unchlorinated Hydrocarbons			Iron	<0.1
Cyanides	0.44		Lead	<0.3
Fluorides	0.3		Magnesium	
Hardness, Total			Manganese	
Hardness			Mercury	0.007
Ammonia			Molybdenum	0.4
Nitrate			Nickel	
Nitrite			Potassium	
Kjeldahl			Selenium	
Oil/Grease	4.0		Sodium	
pH (Units)	7.2		Tin	
Phenols			Titanium	
Phosphate, Total			Zinc	0.59
Silica, Dissolved			Immediate Oxygen Demand	
Solids			Biochemical Oxygen Demand (5 days)	11.1
Total	796		Biochemical Oxygen Demand (20 days)	
Suspended	70		Coliform, Total (MPN/100 ml.)	
Volatile	172		Coliform, Fecal (MPN/100 ml.)	
Total Dissolved			Fecal Streptococcus (MPN/100 ml.)	
Volatile Suspended	10		Total Plate Count (per ml.)	
Settleable Solids			Odor (Units)	
Sulfates	200		Color (Units)	
Sulfides			Specific Conductance (micromhos/cm.)	
Sulfites			Taste (Units)	
Total Non-Volatile Suspended	10		Turbidity (J.T.U.)	<18
Total Non-Volatile Solids	624		Silver	<0.1

Note: All Results are given in mg./l. unless otherwise shown.

REMARKS:

845990184

United States Testing Company, Inc.

CLIENT: Westinghouse, Newark, N.J.

67170  
M-315  
Number

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Aluminum	m	ml	m
Arsenic	ND	-	-
Antimony	ND	-	-
Barium	ND	-	-
Boron	ND	-	-
Bismuth	ND	-	-
Cadmium	ND	-	-
Calcium	P	P	P
Chromium	ND	ND	m
Cobalt	ND	-	-
Copper	t	m	t
Iron	Ml	Ml	M
Lead	tl	-	-
Lithium	ND	-	-
Magnesium	Ml	-	-
Manganese	tl	-	-
Molybdenum	ND	-	-
Niobium	ND	-	-
Nickel	ml	m	ml
Sodium	Pl	M	Pl
Silicon	M	Ml	Ml
Silver	ft	-	-
Tantalum	ND	-	-
Tin	tl	t	tl

CLIENT: Westinghouse, Newark, N.J.

United States Testing Company, Inc.

67

M-

Nu

Emission spectrograph semi-quantitative analyses.

Sample Number	<u>1</u>	<u>2</u>	<u>3</u>
Titanium	tl	-	-
Tungsten	ND	-	-
Vanadium	ND	-	-
Zinc	tl	-	-
Zirconium	ND	-	-

Percent of total solids.

P - 10 to 100%  
M - 1 to 10%  
m - .1 to 1.0%  
t - .01 to .1%  
ft - less than 0.01%  
vft - very faint trace

\* - less than figure shown  
h - Upper half of range shown  
l - Lower half of range shown  
ND - Not detected



*file  
Pollution*

Mr. S. Iannaccone  
Plant Engineer  
Measurements Division  
Newark, New Jersey

Aquatechnics  
From : Hinsdale, Illinois  
~~XXX~~ : (312) 325-2005  
Date : July 21, 1970  
Subject: Proposal for Consult  
Engineering Service  
Industrial Wastewater  
Treatment  
Our File No. XP-55

Dear Mr. Iannaccone:

As per our discussion, we are pleased to submit our proposal for the above noted engineering services.

We propose to conduct on-site sampling of wastes emanating from the plating operations, as well as total plant effluent; run treatability tests on these wastes; define the problems; and study alternate solutions to these problems.

In defining the problems and establishing the degree of treatment required, we shall utilize criteria found for similar wastes in several of the states in which we have had experience. Among these states are Illinois, Indiana, New York, Ohio, and Pennsylvania.

We propose to commence this work within one (1) month of acceptance of this proposal. We suggest a budget figure of \$10,000. This sum will not be exceeded.

If you have any questions regarding this proposal, please feel free to call upon us.

Westinghouse Electric Corporation  
Aquatechnics - Consulting Engineers

Harris E. Dicker  
Manager

HED/JZW/sak  
cc: Mr. T. Berry  
Mr. P. Frank




Pittsburgh  
Westinghouse Bldg. - Gateway Center

Mr. B. A. Kerns  
Manager Environmental Control

From : Relay-Instrument Division  
WIN  
Date : October 3, 1972  
Subject: Waste Effluent Survey

To keep you abreast of the development in this area with respect to the Newark Plant and the Passaic Valley Sewerage Authority, I am enclosing a copy of our report submitted July 18, 1972 to PVSA. On Tuesday, September 26, a representative of the Passaic Valley Sewerage Authority stopped in to take samples of our effluent for review by the State of New Jersey EPA. He had little knowledge how these samples would be used but he did indicate that they were looking for mercury. He also indicated that their new Treatment Plant would on line in about 4-5 years and at this time the thinking is that industrial users would pay a surcharge, and perhaps some minimum local treatment of effluent before discharging into the system would be required.

As further information becomes available, I will keep you advised.

  
S. C. Iannaccone  
Works Engineer

SCI/sd





Return to:  
PASSAIC VALLEY SEWERAGE COMMISSIONERS  
600 Wilson Avenue  
Newark, N. J. 07105  
(201) 344-1800

Date: 3-19-75

Plant Ref. No. 1DE0122

## WASTE EFFLUENT SURVEY

(For Industries Served by the Passaic Valley Sewerage Commissioners)

Plant Name: Westinghouse Electric Corp., Relay-Instrument Division

Address: 95 Orange Street, Newark, New Jersey Zip 07101

Person and Title to whom any further inquiries should be directed:  
S. C. Iannaccone, Manager Works Engineering

Phone No.: 465-2432

Number of Employees: 1300

Number of Working Days Per Week: 5

Number of Shifts Per Day: 1200 People 1st Shift, 93 2nd Shift, 2 3rd Shift

Area of Property: 3.45 Acres, or Sq. Ft.

Type of Industry and 4 digit U. S. Standard Industrial Classification No.: S.I.C. 36

Electrical Machinery and Equipment

Finished Product(s): Relays and Instruments

Average Production: 15,000, 20,000 units per month

Raw Materials Used: Steel, plastics, copper, coating materials

Brief Description of Operations: Parts are fabricated in our press shop or machine shops  
and assembled into completed units.

845990189

Water received in *Gallons* (Note: multiply cu. ft. x 7.48)

Purchased water in 19 74 from: City of Newark

1st Quarter ..... 19,750,250

2nd Quarter ..... 15,287,250

3rd Quarter ..... 12,750,250

4th Quarter ..... 15,750,250

Total Purchased 19 74: ..... 63,538,000

Well Water

1st Quarter ..... 30,000,000

2nd Quarter ..... 30,000,000

3rd Quarter ..... 30,000,000

4th Quarter ..... 30,000,000

Total well water received in 19 74: ..... 120,000,000

River Water

1st Quarter .....

2nd Quarter .....

3rd Quarter .....

4th Quarter .....

Total river water taken in 19 74: ..... - 0 -

TOTAL OF ALL WATER RECEIVED IN 19 74: ..... 183,538,000

Water Use in 19 74:

Water to Product (include evaporated and lost water): ..... 500,000

Water to Sanitary Sewer: ..... 91,638,000

Old well. Returned to earth

Water to ~~Storm Sewer, River or Ditch~~ ..... 91,400,000

TOTAL WATER USE IN 19 74: ..... 91,638,000

Name of River, Stream, or Tributary, and location of storm sewer or ditch outlet to river, stream,  
or tributary: .....

**ANSWER THE FOLLOWING QUESTIONS ONLY IF THE  
PLANT WASTE INCLUDES WASTE ATTRIBUTABLE TO INDUSTRIAL OPERATIONS**

(Note: Analyses should be based on a 24-hour composite sample)

Characteristics of Plant Waste discharged to sanitary or combined sewer, after treatment if any. Indicate units of measure where applicable (e.g. Mg/l).

- a) pH: 7.8 b) Turbidity: less than 18 JTU
- c) Temperature: 47-60°F d) Radioactive? Yes        No X
- e) Solids Concentration:
- |                     |                 |           |                  |         |                 |
|---------------------|-----------------|-----------|------------------|---------|-----------------|
| 1) Total Solids     | <u>796 mg/L</u> | Volatile  | <u>172 mg/L</u>  | Mineral | <u>624 mg/L</u> |
| 2) Suspended Solids | <u>20 mg/L</u>  | Volatiles | <u>10.0 mg/L</u> | Mineral | <u>10 mg/L</u>  |
- f) Oil and Grease Concentration:
- |                    |               |
|--------------------|---------------|
| 1) Floatable Oils  | <u>4 mg/L</u> |
| 2) Emulsified Oils | <u>4 mg/L</u> |
- g) Chlorides 190 mg/L
- h) Chemical Oxygen Demand (C.O.D.): 656 mg/L
- i) 5-day Bio-chemical Oxygen Demand (B.O.D.): 11.1 mg/L
- j) Total organic carbon (T.O.C.): 9.65 mg/L
- k) Metallic Ions—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury, Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.)
- |        |                     |         |                    |        |                     |
|--------|---------------------|---------|--------------------|--------|---------------------|
| copper | <u>&lt;0.1 mg/L</u> | Lead    | <u>0.3 mg/L</u>    | Zinc   | <u>0.59 mg/L</u>    |
| iron   | <u>&lt;0.1 mg/L</u> | Mercury | <u>0.0007 mg/L</u> | Silver | <u>&lt;0.1 mg/L</u> |
| nickel | <u>&lt;0.1 mg/L</u> |         |                    |        |                     |
- l) Toxic Material—Name and concentration e.g., cyanide salts, etc.): <2.5 mg/L (Bromides)
- Cyanides 0.44 mg/L
- m) Solvents—Name and concentration: None
- n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): None
- o) Date and time span of sample 4 P.M. 4/18/72 3 P.M. 4/19/72

Explain hours, method of discharge of waste to Sanitary Sewer and peak rate of flow, e.g., (continuing for 8 hours per day, 5 days per week at 100 gal./day rate) (batch twice a day for 20 minutes at 100 gal./min.) (Continuous 24 hours steady or with peaks at 2 P.M., peak rate 3 M.G.D.) etc.

Large Plant tied in at six locations results are composite of all lines. Most of  
flow is 5 days 8 A.M. - 12 Midnight. Average flow 25,000 Gal/Hr Peaks 9-10 A.M.  
and 1-3 P.M. 30,000 Gals/Hr. Midnight to 8 A.M. 5000 Gals/Hr

845990191

Characteristics of Plant Discharge to Storm Sewer, River, or Ditch, after treatment if any. Indicate units of measure where applicable (e.g., Mg/l).

a) pH: ..... b) Turbidity: .....  
c) Temperature: ..... d) Radioactive? Yes ..... No .....

e) Solids Concentration:

1) Total Solids ..... Volatile ..... Mineral .....

2) Suspended Solids ..... Volatile ..... Mineral .....

f) Oil and Grease Concentration:

1) Floatable Oils .....

2) Emulsified Oils .....

g) Chlorides .....

h) Chemical Oxygen Demand (C.O.D.): .....

i) 5-day Bio-chemical Oxygen Demand (B.O.D.): .....

j) Total Organic Carbon (T.O.C.): .....

k) Metallic Ions—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury, Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.):  
.....  
.....

l) Toxic Material—Name and concentration (e.g., cyanide salts, etc.): .....

m) Solvents—Name and concentration: .....

n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): .....

o) Date and time span of sample: .....

Do you pretreat any waste before discharge? .....

If so, describe process and disposal of residue removed: .....

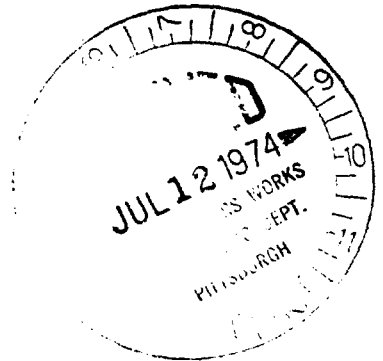
Certification of Laboratory doing sampling and making analyses shall be given. Procedures shall be those shown in the 13th edition of Standard Methods for the Examination of Water and Wastewater, where applicable. If no procedure is applicable, the laboratory is to describe method and procedure used in analyses.



845990193

From : Gateway  
WIN : 235-3616  
Date : June 27, 1974  
Subject: Oil Pollution Preventi  
SPCC Plan

Mail to: V. P. Valeri  
Headquarters Works Engineering  
Westinghouse Building  
Pittsburgh, Pennsylvania 15222



We have examined the attached information and:

- ☒ Have determined that these regulations do not apply to this location.
- ☐ We have a SPCC Plan on file and have enclosed a copy of this plan for the Corporate File.
- ☐ Our SPCC Plan is in the process of further refinement and approval; it will be forwarded to you by August 1, 1974.

Name J C Jassmacione  
Title Mgr. Works Eng  
Division Newark N.J.  
Location Kelley Inst Div

Note we have a common storage facility with Bloomfield, Hillside, and Dover. At 29 Riverside Ave Newark N.J. F. Hanzel of Bloomfield has agreed to file necessary Plan.

J C Jassmacione



*From:* Relay-Instrument Division  
Newark, N.J.

*Date:* March 20, 1975

*Subject:* Waste Effluent Survey

Pittsburgh  
Westinghouse Bldg. - Gateway

Mr. B. A. Kerns  
Manager Environmental Control

To keep you abreast of the development in this area with respect to the Newark Plant and the Passaic Valley Sewerage Authority, I am enclosing a copy of our report submitted March 20, 1975 to PVSA.

As further information becomes available, I will keep you advised.

A handwritten signature in black ink, appearing to read 'S. C. Iannaccone'.

S. C. Iannaccone, Manager Works Engineering  
(att.)

845990194

CARMINE T. PERRAPATO  
CHAIRMAN

THOMAS J. CIFELLI  
VICE CHAIRMAN

ROBERT J. DAVENPORT  
BEN W. GORDON  
JOSEPH M. KEEGAN  
CHARLES A. LAGOS  
COMMISSIONERS

PASSAIC VALLEY SEWERAGE COMMISSIONERS

600 WILSON AVENUE  
NEWARK, N.J. 07105  
(201) 344-1800



SEYMOUR A. LUBETKIN  
CHIEF ENGINEER

CHARLES C. CARELLA  
CHIEF COUNSEL

MRS. CHARLES T. SCHAEDEL  
CLERK-TREASURER

NEWARK NJ

January 6, 1977

Westinghouse Electric Corporation  
90 Orange Street  
Newark, New Jersey 07101

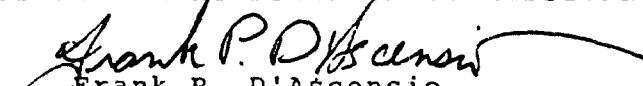
Dear Sir:

In accordance with Federal regulations PVSC must develop data from those industries that discharge heavy metals to the sanitary sewer.

A review of the Waste Effluent Survey which you recently submitted to PVSC indicated that your industrial waste stream contained one or more heavy metals, such as chromium, nickel, lead etc.

Please check below the statements that accurately describe your operations or portions thereof and return the completed form within 10 working days.

Very truly yours,  
PASSAIC VALLEY SEWERAGE COMMISSIONERS

  
Frank P. D'Ascensio  
Superintendent II

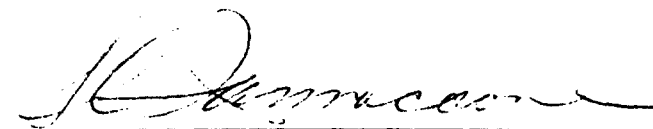
The above company:

- ☒ Electroplates ferrous or nonferrous basis materials with common or precious metals;
- ☐ Anodizes ferrous or nonferrous materials;
- ☒ Coats ferrous or nonferrous materials(chromating, phosphating etc.);
- ☐ Does not conduct electroplating operations. The heavy metals originate from the following operation or operations;

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date

1/10/77

  
Signature

845990195

**PRIVILEGED**

845990196

Renewal Application

Y or N

PASSAIC VALLEY SEWERAGE COMMISSIONERS

SEWER CONNECTION APPLICATION

PART I - SECTIONS A-C

SECTION A: GENERAL INFORMATION

Applicant is:  
Corporation ☐  
Partnership ☐  
Other ☐

1. Company Name: Westinghouse Electric Corporation
2. Location: 95 Orange Street  
Newark, NJ Zip Code: 07101
3. Mailing Address: Same  
Zip Code: \_\_\_\_\_  
Name, title, address and telephone number of person to contact concerning information provided in this application:  
4. Name of Contact Official: R. Zeiller  
Title: Supvr. Ind., Mfg. & Works Engineering Phone No.: 465-2452  
5. Address: Same
6. Number of Employees - Full Time: 577 Part Time: None
7. Number of Work Days Per Week: 5  
Number of Shifts Per Day: 2  
Is production seasonal? No If so, explain: \_\_\_\_\_
8. New Users Only: Indicate date user desires to commence operations: \_\_\_\_\_
9. If property is owned, indicate Lot and Block Numbers: \_\_\_\_\_  
Assessed Value: 19 \_\_\_\_\_
10. If property is rented, indicate name and address of Landlord: \_\_\_\_\_

SECTION B: PRODUCT OR SERVICE INFORMATION

11. Brief description of manufacturing or other activity performed:  
Electrical manufacturer of relays and instruments
12. Principal raw materials used: Ferrous and non-ferrous metals  
and plastics
13. Principal products or services: Relays and Instruments



**PRIVILEGED**SECTION C: WATER DATA

14. Water Received: Year
- 1980
- (Report Volume in Gallons)

	<u>PURCHASED</u>	<u>WELL</u>	<u>RIVER</u>	<u>TOTAL</u>
1st Qtr.	10,054,616	13,032,000	-	23,086,616
2nd Qtr.	11,123,508	"	-	24,155,508
3rd Qtr.	8,964,032	"	-	21,996,032
4th Qtr.	8,386,576	"	-	21,418,576

1980 GRAND TOTAL . . . . . 90,656,732

NOTE: Cu. Ft. X 7.48 = Gallons

# 07766827000

15. Name water supplier:
- Newark Water Dept.
- Account#:
- 07766826000

16. Is well water metered?
- No
- Is river water metered?
- 

17. Water Distribution: Year
- 1980
- (Report Volume in Gallons)

<u>Use</u>	(List totals in gallons per year)		<u>City</u>	<u>Well</u>
			(Gals. x 10 <sup>6</sup> )	
(a) sanitary sewer (include industrial & domestic)			<u>36,529</u>	<u>20.0</u>
(b) separate storm sewer, river, or ditch. . . . .			<u>-</u>	<u>-</u>
(c) contained in product . . . . .			<u>-</u>	<u>-</u>
(d) evaporation. . . . .			<u>2.0</u>	<u>0</u>
(e) waste haulers. . . . .			<u>-</u>	<u>-</u>
(f) clean water returned to ground wells			<u>-</u>	<u>32.128</u>

Name, Address &amp; Registration Number of Waste Haulers Used \_\_\_\_\_

18. Is volume in 17 (a) measured?
- City
- How?
- Metered

Certification: Well Estimated

The information contained in Part I of this application is familiar to me and, to the best of my knowledge and belief, such information is true, complete and accurate.

If the applicant is a corporation, a corporate resolution is attached granting me the authority to sign the application on behalf of the corporation.

Name of Signing Official: R. ZeillerTitle: Supvr. Ind., Mfg. & Works Engineering

2/6/81  
Date

R. Zeiller  
Signature

PART II - SECTIONS D-F

**PRIVILEGED**

These sections must be completed if the Applicant:

- (a) discharges more than 25,000 gallons per day of either domestic and/or industrial wastes to the sanitary or combined sewer, or,
- (b) discharges toxic wastes or wastes which can have a significant impact on the PVSC treatment works.

Questions regarding the applicability of this form to your facility may be answered by contacting the Industrial Department of PVSC at 344-1800.

Company Name: Westinghouse Electric Corporation

Location: 95 Orange Street, Newark, NJ 07101

SECTION D: OPERATIONAL CHARACTERISTICS

- 19. Discharge of industrial waste is continuous \_\_\_\_\_ or intermittent X
- 20. Discharge of industrial waste occurs between the following hours: 6:30 AM - 1  
\_\_\_\_\_
- 21. Industrial Waste is, or may be discharged:
  - (a) only to the sanitary (or combined) sewer Yes
  - (b) to both the sanitary (or combined) sewer  
and a separate storm sewer, river or ditch No
  - (c) NPDES Permit Number \_\_\_\_\_
- 22. Describe seasonal variations, if any, giving dates, volumes, rates, hours, etc.  
Include variations in product lines which affect waste characteristics.  
Negligible seasonal variation in plant production. 280 or more production  
days annually. Vacation scheduled plant shutdown - week each in July and  
December.
- 23. Describe any pretreatment process in use: None  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

832/8016443

845990198

**PRIVILEGED**

.. Describe any treatment process applied to raw water taken into the plant:

1. Boiler feed water is treated for corrosion and scale and pH.

2. Air conditioning cooling tower water is treated for corrosion, scale and pH.

25. Describe any processes used to recycle water: 1. (2) Paint Spray Booths - water wash type; 2. Air conditioning cooling towers (6); 3. 75% well water supply is used for equipment cooling and returned to ground or discharged to sewage after usage in sanitary facilities.  
(ATTACH ADDITIONAL SHEETS IF NECESSARY)

SECTION K: SEWER CONNECTION INFORMATION

26.

OUTLET * NUMBER	SEWER SIZE (INCHES)	DAILY FLOW (GALLONS)	CONTAINS INDUSTRIAL WASTE (YES OR NO)
1 B-B	14	78,737	Yes
2 B-B	10	18,200	"
3 R-1	8	19,503	"
4 J-1	5	12,361	"
5 I-1	4 CI) 6 DI	41,748	"
I-1	4 DI)	20,874	"
6 Yard	6	3,323	"
7 H-B	6	7,143	No

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

Attach a plot plan of the property, showing:

- (a) all existing or proposed sewer and drain lines (including outlets to a storm sewer, ~~XXXXXX~~);
- (b) sample point(s);
- (c) details of the connection(s) to the municipal (or PVSC) sewer, including the distance and direction of each connection from the nearest street intersection.

\*If only one outlet, leave blank.

Number multiple outlets starting with 1.

832/8016444

SECTION F: ANALYSIS OF INDUSTRIAL WASTE

**PRIVILEGED**

27. Analysis listed below is based on a composite sample of industrial waste taken from the following outlets listed in Section E:

Outlets 1, 2, 3, 4, 5 and 8

(See instructions for proportioning samples from more than one outlet)

28. Analytical Data: Concentration values are to be reported in mg/l (ppm) unless specified otherwise; analyze waste for those parameters marked with an asterisk (\*), analyze waste for other parameters reasonably expected to be present. Code numbers are for internal use only.

**PRIVILEGE**

REPORT TO THE NEAREST UNIT: X (EXAMPLE: 150 mg/l)		
CODE	PARAMETER	VALUE
* 0100	Color (Apha Units)	5
0200	Radioactivity (PL-1)	-
* 0500	Total Solids	919
* 0505	Total Volatile Solids	229
* 0510	Total Mineral Solids	690
* 0530	Total Suspended Solids	13
* 0540	Volatile Suspended Solids	10
* 0550	Mineral Suspended Solids	3
* 0070	Turbidity (JTU)	4
0550	Emulsified Oil or Grease	20
* 0940	Chlorides	102
* 0945	Sulfates	195
* 0310	Biochemical Oxygen Demand (BOD)	7
* 0340	Chemical Oxygen Demand (COD)	47
* 0680	Total Organic Carbon (TOC)	7

REPORT TO THE NEAREST TENTH: 0.X (EXAMPLE 1.6 mg/l)		
CODE	PARAMETER	VALUE
0745	Sulfide	-
0740	Sulfite	-
8260	Surfactants (MBAS)	-
* 9000	pH (standard units) (range)	6.5-7.5
0625	Kjeldahl N as N	-
0610	Ammonia as N	-
0620	Nitrate as N	-
0615	Nitrite as N	-
0507	Ortho Phosphates as P	-
	Cyanide Total	0.24
	Cyanide A	< 0.10
	Fluoride	< 0.10
	Phosphorous	0.15

832/8016445

**PRIVILEGED**

REPORT TO THE NEAREST HUNDREDTH: 0.XX (EXCEPT WHERE INDICATED) (EXAMPLE: 0.36 mg/l)		
CODE	PARAMETER	VALUE
1097	Antimony (Sb)	-
1002	Arsenic (As)	-
1022	Boron (B)	-
1027	Cadmium (Cd)	< 0.01
1034	Chromium Total (Cr)	< .05
1042	Copper (Cu)	1.05
1045	Iron (Fe)	0.46
1051	Lead (Pb)	1.18
	Chromium VI	< 0.05

REPORT TO THE NEAREST HUNDREDTH: 0. (EXCEPT WHERE INDICATED) (EXAMPLE: 0.36 mg/l)		
CODE	PARAMETER	VALUE
1900	(Report to Mercury 0.XXX)	0.0
1067	Nickel (Ni)	0.7
1147	Selenium (Se)	-
1077	Silver (Ag)	< 0.01
1102	Tin (Sn)	< 0.80
1092	Zinc (Zn)	1.10
4053	(Report to Pesticides 0.XXX)	-
2730	Phenol	-

29. Samples collected by: U.S. Testing Company, Inc. Date: 1/22-1/24/80

30. Samples analyzed by: " " " " Date: 2/22/80

Products being manufactured when sample was collected: \_\_\_\_\_

Relays and instruments

Certification:

The information contained in Part II of this application is familiar to me and, to the best of my knowledge and belief, such information is true, complete, and accurate.

If the applicant is a corporation, a corporate resolution is attached granting me authority to sign the application on behalf of the corporation.

31. Name of Signing Official: R. Zeiller

Title: Supvr. Ind., Mfg. & Works Engineering

2/6/81  
Date

  
Signature

(II-4)

832/8016446

845990201

COMPLIANCE SCHEDULE

Westinghouse Electric Corporation  
95 Orange Street  
Newark, N. J. 07101

**PRIVILEGED**

2) Monitoring

- a) Project assigned to Mr. O. J. D'Amato or our Works Engineering Department on February 2, 1981.
- b) Included in our sewer connection application submitted February 27, 1980 is a report from U.S. Testing Company, Inc., of Plant effluent which was sampled and analyzed in January 1980.
- c) Final plans and specifications to be completed by April 15, 1981.
- d) First equipment to be ordered by April 15, 1981.
- e) Construction to be completed by August 1, 1981.
- f) Facility to be on stream by September 1, 1981.



R. Zeiller  
Supvr. Ind., Mfg., &  
Works Engineering

RHZ/sd

832/8016447

845990202

Westinghouse Electric Corporation

Power Systems

**PRIVILEGED**



Field Instrument Division

95 Orange Street  
Newark, New Jersey 07101  
(201) 465 0222

February 13, 1981

Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, N. J. 07105

Attention: Mr. John Kinder

As a result of the meeting and discussion with you on January 20, 1981, there is enclosed a revised and updated sewer connection application and a compliance schedule covering the monitoring phase.

The report prepared by the U.S. Testing Company indicates that in our Plant composite all parameters including BOD and TSS are extremely low. Consequently, we would like to submit the following sampling plan for your consideration and approval:

1. Five (5) check points to be sampled daily. These five check points are as noted on print titled "sewer sample check points" dated 3-1-74 and are identified as sample points #1, 2, 3, 4, and 5. We are considering combining the check points in Building I and J thus eliminating sample point #5 since this would be already included in sample point #4 if this is physically possible.
2. The daily samples from the sample check points to be combined into one composite Plant sample for analysis each week.

If the above sampling plan is acceptable to you, it would save us considerable labor and analysis expense.

We are considering the purchase of ISCO Model 1580 automatic samplers. We believe that these units would be satisfactory to you for the obtaining of samples, and would expect that any future requirements of PVSC would permit this continued use of such units.

R. Zeiller  
Supvr. Ind., Mfg., &  
Works Engineering

RHZ/sd

845990203

832/8016440

JOSEPH M. KEEGAN  
MAYOR

THOMAS J. CIPELLI  
CITY CHAIRMAN

VINCENT CORRADO  
JOSEPH J. SAVENPORT  
EDWARD M. GIACOMARRO  
ED W. GORDON  
CHARLES A. LAGOS  
CITY COMMISSIONERS

PASSAIC VALLEY SEWERAGE COMMISSIONERS

600 WILSON AVENUE  
NEWARK, N. J. 07105  
(201) 344-1800

CARMINE T. PERRAPPA  
EXECUTIVE DIRECTOR

ROCCO D. RUC  
CHIEF ENGINEER

CHARLES C. CAREL  
CHIEF COUNSEL

NORMAN E. DARMSTATT  
CLERK

**PRIVILEGED**

MAR 19 1981

WESTINGHOUSE ELECTRIC CORP.  
95 ORANGE STREET  
NEWARK, NJ 07101

*RECEIVED 74*

ATTENTION: ~~Mr. H. HENDEL~~

RE: Pretreatment for Mercury

On December 3, 1980, the Passaic Valley Sewerage Commissioners held a Public Hearing to review a proposed pretreatment regulation for Mercury. Subsequent to this Hearing PVSC received various comments from industrial users and other individuals. After a thorough review of all the data available an interim pretreatment regulation was enacted on March 10, 1981. The interim regulation is significantly less stringent than the one which had been proposed initially. Attached to this letter is a copy of this regulation together with a Basis Document which explains the rationale for the limitations contained in the regulation. It should be emphasized that this is only an interim regulation and that the final regulation has yet to be determined.

Your company has been identified by PVSC as an actual or potential discharger of mercury. Therefore, you will be required to conduct a 3 month monitoring program to aid us in determining the total contribution of mercury from the industrial users of our sewerage system. The sampling program will run from April 27 through July 24, 1981. Your company is required to sample and analyze for mercury as follows:

Analyze a representative daily composite sample of industrial waste once per month for 3 consecutive months.

832/8016438

845990204




**PRIVILEGED**

You may already be sampling and analyzing for User Charge. It is permissible to also analyze this sample for mercury as needed. A sample form is enclosed for your use in reporting the results. Note that it is also necessary to report the total volume discharged during the monitoring period as well as the total number of days worked. The instructions for preparation and handling of the mercury samples are contained in the attached regulation, and are in addition to the User Charge sampling requirements. If you have any questions please call Tom Mack in the Industrial Waste Control Department.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS



Frank P. D'Ascensio,  
Superintendent of Industrial Waste Control

FPD/saj

ENCLOSURE 3

832/8016439

845990205



# United States Testing Company, Inc.

Environmental Sciences Division

1415 PARK AVENUE • HOBOKEN, NEW JERSEY 07030 • 201-792-2400

Correct

## REPORT OF TEST

05487

NUMBER

CLIENT: Westinghouse Electric Corp.  
95 Orange Street  
Newark, NJ 07101

**PRIVILEGED**

October 28, 19

SUBJECT: 24-hour composite wastewater samples collected by USTC personnel 9/29-30/81.

### Project:

Chemical and Biological analysis of the submitted samples

### Procedure:

Four 24-hour composite wastewater samples were collected 9/29-30/81 at each of four sites identified by the Client. The sites were identified as outlets 1 through 4, and are located as follows:

#### Outlet #

#### Location

1	Manhole in telephone room
2	Pit outside of telephone room
3	Cleanout in pit in warehouse
4	Manhole on Lackawanna Avenue

Each of the 24-hour composite samples were analyzed individually. Further, two samples were prepared by mixing aliquots of these samples. An industrial waste composite was prepared by mixing aliquots from outlets 1, 3, and 4; and a plant composite was prepared by mixing aliquots of all outlet samples. The composites were mixed in proportion to estimated flows for each outlet, as supplied by the Client.

832/8016489

SIGNED FOR THE COMPANY

BY

*Allan Tordini*

Allan Tordini

Page 1 of 3

E.Rider/vh

Laboratories in: New York • Chicago • Los Angeles • Tulsa • Memphis • Philadelphia • Richmond

UNITED STATES TESTING COMPANY, INC. REPORTS AND LETTERS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED AND THEY AND THE NAME OF UNITED STATES TESTING COMPANY, INC., OR ITS SEAL OR INSIGNIA ARE NOT TO BE USED UNDER ANY CIRCUMSTANCES IN ADVERTISING TO THE GENERAL PUBLIC AND THEIR COMMUNICATION TO ANY OTHERS ON THE USE OF THE NAME OF UNITED STATES TESTING COMPANY, INC. MUST BE IN WRITING AND FROM WHATEVER AUTHORITY HAS BEEN APPOINTED BY THE STANDARD AND PRACTICES IN THE FIELD. IN THE EVENT OF A DISCREPANCY, THE CLIENT'S COPY OF THE REPORT SHALL BE THE FINAL AUTHORITY. THE TEST AND INSPECTION RESULTS ARE NOT INDICATIVE OR REPRESENTATIVE OF THE QUALITY OF THE SYSTEM WHICH THE SAMPLE WAS TAKEN OR OF APPARENTLY IDENTICAL OR SIMILAR SYSTEMS AND NOTHING CONTAINED IN OUR REPORTS SHALL BE HELD TO IMPLY OR MEAN THAT UNITED STATES TESTING COMPANY, INC. CONDUCTS ANY QUALITY CONTROL PROGRAM OR THE CLIENT TO WHOM THE REPORT IS ISSUED. SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS.

CLIENT: Westinghouse Electric Corp.

United States Testing Company, Inc.

Corrected  
05487

Number  
10/28/1

Procedure (Continued):

**PRIVILEGED**

The proportioning scheme was as follows:

<u>Outlet #</u>	<u>Portion of Total Flow (%)</u>
1	45
2	6
3	8
4	41

Analyses were performed in accordance with the current United States Environmental Protection Agency procedural requirements for National Pollutant Discharge Elimination System Permits as specified by the Environmental Protection Agency, unless modifications or alterations of the specific procedures are indicated. The procedures can be found in the following specific references.

- 1) Methods for Chemical Analysis of Water and Wastes, Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio, 1979
- 2) Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 14th edition, 1975
- 3) Annual Book of Standards, part 31, 1979, American Society of Testing and Materials



Westinghouse Electric Corporation

Power Systems

Relay-Instrument Division  
85 Orange Street  
Newark New Jersey 07101  
(201) 465 0222

November 4, 1981

Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

**PRIVILEGED**

ATTENTION: Mr. Thomas Mack  
Supervisor of Industrial Waste Control

In our letter dated February 13, 1981 to the Passaic Valley Sewerage Commissioners, attention of John Kinder, we made certain proposals relative to the monitoring phase and the use of one plant composite sample. As a result of changes we made in our system and a recent analysis of our industrial waste, we wish to modify our sampling plan and submit evidence to justify our request for utilizing one industrial waste plant composite sample. The modified sampling plan we wish to submit for your consideration and approval is as follows:

1. Three (3) outlets to be sampled daily. These three outlets are as noted on print titled "Sewer Sample Check Points" dated 3/1/74 and are identified as sample points #1, 3 and 4. Sample point #5 has been excluded since this will be included by utilizing sample point #4. Outlet #2 now contains only domestic waste and is not included in the sampling plan.
2. The daily samples from the three outlet sample check points to be combined into one industrial waste plant composite sample for analysis on a weekly basis.

In addition to city water our plant is supplied with well water from a well located on the premises. In order to accurately determine our well water consumption and the amount discharged into the sewerage system, we have installed water meters in our well supply system at key locations. For your information there is enclosed a copy of a memorandum dated August 7, 1981 from Alvin L. Zach, Director, Department of Engineering for the City of Newark, outlining the procedure for reading these meters to determine the net discharge to the sewerage system. The metering system together with the city water meters, less a small amount for evaporation, will permit precise accounting of water consumption both for our control of water usage and for sewerage tax abatement.

845990208

832/8016484

**PRIVILEGED**

November 4, 1981

There is enclosed a copy of a test report dated October 28, 1981 made by United States Testing Co., Inc. The test results of this report were used in our calculations for substantiating our request for use of an industrial waste plant composite sampling plan.

The estimated flow at each of the four outlets is outlined in table titled "Sewer Outlet Flow Chart." In this table we have also listed variations from estimated flow figures of 25% and 50% increases and 25% and 50% decreases in both outlets No. 1 and No. 4 in order to demonstrate the effect such variations would have upon the total TSS and BOD charge.

Using the test report analysis results together with the estimated flows and variations thereof, we have calculated the cost of the TSS charge, BOD charge and combined TSS and BOD charge. The industrial composite test results and the total amount of industrial sewerage were utilized to determine an annual cost of TSS and BOD for comparison with the TSS and BOD cost resulting from the individual outlets. The TSS charge was based upon \$38 per ton and the BOD charge was based upon \$70 per ton. The results of these calculations are outlined in table titled "Annual Cost of TSS and BOD in dollars."

Since we now have a method for precisely determining total water consumption for sewerage tax abatement and the very small change in TSS and BOD charge in the event of variations in flow at the two main outlets, we are requesting your consideration and approval to avoid the installation of flow measuring devices in the sewerage outlets and to permit us to utilize one industrial waste plant composite sample to be analyzed on a weekly basis.

Sincerely yours,

WESTINGHOUSE ELECTRIC C



R. Zeiller  
Supervisor  
Ind., Mfg. & Works Engi

RZ:lns  
Enc.

SEWER OUTLET FLOW CHART

ESTIMATED SEWERAGE PER YEAR IN THOUSANDS OF GALLONS

Outlet No.	Total Sewerage	Percent of Total	Industrial Sewerage	Percent of Total
1	23,056	45	23,056	48
*2	3,066	6	—	—
3	4,323	8	4,323	9
4	<u>20,655</u>	<u>41</u>	<u>20,655</u>	<u>43</u>
	51,100	100	48,034	100

**PRIVILEGED**

\*Domestic Sewerage Only

ASSUMED VARIATIONS IN INDUSTRIAL SEWERAGE  
PER YEAR IN THOUSANDS OF GALLONS

Outlet No.	25% Increase at No. 1 Decrease at No. 4	50% Increase at No. 1 Decrease at No. 4	25% Decrease at No. 1 Increase at No. 4	50% Decrease at No. 1 Increase at No. 4
1	28,820	34,584	17,292	11,528
3	4,323	4,323	4,323	4,323
4	<u>14,891</u>	<u>9,127</u>	<u>26,419</u>	<u>32,183</u>
	48,034	48,034	48,034	48,034

832/8016486

845990210

ANNUAL COST OF TSS AND BOD IN DOLLARS

TSS

**PRIVILEGED**

Outlet No.	At Estimated Flow	25% Incr. at #1 Decr. at #4	50% Incr. at #1 Decr. at #4	25% Decr. at #1 Incr. at #4	50% Decr. at #1 Incr. at #4
1	71.19	88.98	106.76	53.39	35.59
3	14.35	14.35	14.35	14.35	14.35
4	<u>44.16</u>	<u>31.82</u>	<u>19.51</u>	<u>56.47</u>	<u>68.78</u>
TOTAL	129.70	135.15	140.62	124.21	118.72

**PRIVILEGED**

BOD

1	28.25	35.30	42.36	21.17	14.12
3	13.48	13.48	13.48	13.48	13.48
4	<u>6.02</u>	<u>4.34</u>	<u>2.66</u>	<u>7.70</u>	<u>9.38</u>
TOTAL	47.75	53.12	58.50	42.35	36.98

TSS & BOD

TOTAL	177.45	188.27	199.12	166.56	155.70
-------	--------	--------	--------	--------	--------

INDUSTRIAL COMPOSITE - ANNUAL COST IN DOLLARS

TSS	148.69
BOD	<u>21.01</u>
TOTAL	169.70

832/8016487

845990211

JOHN M. KEEGAN  
IRMAN

MAS J. CIFELLI  
CHAIRMAN

GENT CORRADO  
BERT J. DAVENPORT  
HARD M. GIACOMARRO  
W. GORDON  
ARLES A. LAGOS  
MISSIONERS

PASSAIC VALLEY SEWERAGE COMMISSIONERS

600 WILSON AVENUE  
NEWARK, N. J. 07105  
(201) 344-1800



CARMINE T. PERRA  
EXECUTIVE DIRECTOR

ROCCO D. P.  
CHIEF ENGINEER

CHARLES C. CAR  
CHIEF CLERK

NORMAN E. DARMSTA

January 14, 1982

Westinghouse Electric Corporation  
95 Orange St.  
Newark, N.J. 07101

RE: Industrial Sewer Connection  
Permit

ATTENTION: Mr. R. Zeiller

Dear Mr.

Enclosed you will find your Industrial Waste Permit for discharge  
into the PVSC system.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

  
Frank P. D'Ascensio,  
Superintendent of Industrial Waste Control

FPD/saj

CC: Dr. Marwan Sadat, NJDEP  
Richard Baker, USEPA

832/8016468

845990212



## PASSAIC VALLEY SEWERAGE COMMISSIONERS

## SEWER CONNECTION PERMIT

Permit # 20402052

(Please use the Permit Number on any correspondence with PVSC)  
In compliance with the provisions of the Federal Water Pollution  
Control Act, its amendments, the Clean Water Act and the Rules and  
Regulations of the Passaic Valley Sewerage Commissioners:

WESTINGHOUSE ELECTRIC CORP.

(herein, after referred to as the Permittee)  
is authorized to discharge from a facility located at

95 ORANGE STREETNEWARK, N.J. 07101

to the Passaic Valley Sewerage Commissioners Treatment Works in  
accordance with discharge limitations, monitoring requirements and  
other conditions set forth herein.

Effective Date 1-12-82Expiration Date 1-12-87

PASSAIC VALLEY SEWERAGE COMMISSIONERS

by: *Robert J. Quinn*  
Chief Engineer

832/8016469

845990213

CONDITIONSA. General Prohibitions

(1) No person shall discharge or deposit or cause or allow to be discharged or deposited into the treatment works or public sewer any waste which contains the following:

(A) Explosive Mixtures. Pollutants which create a fire or explosion hazard to the treatment works, collection system or to the operation of the system. Prohibited materials include, but are not limited to, gasoline, kerosine, naphta, benzene, toluene, xylene, ethers, etc.

(B) Corrosive Wastes. Any waste which will cause corrosion or deterioration of the treatment works. All wastes must have a pH not less than 5 nor more than 9. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride or fluoride compounds, etc.

(C) Solid or Viscous Wastes. Solid or viscous wastes which would cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the treatment works. Prohibited materials include, but are not limited to, uncommminute garbage, bones, hides or fleshings, cinders, sand, stove or marble dust, glass, etc.

(D) Oils and Grease. (a) Any industrial wastes containing floatable fats, wax, grease or oils. (b) Any industrial wastes containing more than 100 mg/l of emulsified mineral oil or grease

(E) Noxious Material. Noxious or malodorous solids, liquids or gases, which, either singly or by interaction with other waste are capable of creating a public nuisance or hazard to life, or a or may be sufficient to prevent entry into a sewer for its maintenance and repair.

845990214

832/8016470

(F) Radioactive Wastes. Radioactive wastes or isotopes of such half life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which will, or may, cause damage or hazards to the treatment works or personnel operating the system.

(G) Excessive Discharge Rate. Industrial wastes discharged in a slug of such volume or strength so as to cause a treatment process upset and subsequent loss of treatment efficiency.

(H) Heat. (a) any discharge in excess of 150°F (65°C)  
(b) Heat in amounts which would inhibit biological activity in the PVSC treatment works resulting in a treatment process upset and subsequent loss of treatment efficiency, but in no case shall heat be introduced into the PVSC treatment works in such quantities that the temperature of the influent waters at the treatment plant exceed 40°C (104°F).

(I) Unpolluted Waters. Any unpolluted water including, but not limited to, cooling water or uncontaminated storm water, which will increase the hydraulic load on the treatment system, except as approved by PVSC.

(J) Water. Any water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limits.

(2) No person shall discharge or convey, or permit to be discharged or conveyed, to the treatment works any wastes containing pollutants of such character or quantity that will:

(A) Not be susceptible to treatment or interfere with the

process or efficiency of the treatment system.

(B) Violate pretreatment standards. As pretreatment standards for toxic or other hazardous pollutants are promulgated by USEPA for a given industrial category, all industrial users within that category must immediately conform to the USEPA timetable as well as any numeric limitations imposed by USEPA. In addition, an industrial user shall comply with any more stringent standards as determined by PVSC or other agency.

(C) Cause the PVSC treatment plant to violate its NPDES permit, applicable receiving water standards, permit regulating sludge which is produced during treatment or any other permit issued to PVSC.

#### B. INSTALLATION OF SAMPLERS

The permittee shall install - 24 hr. composite sampler on Outlets 1,3-4 acceptable to PVSC with attachments for affixing seals,

which shall be maintained in proper working order at all times. The installed samplers shall draw a sample, over each operating day, which shall be representative of plant waste.

A one quart or one liter aliquot shall be set aside by

( 9:00 A.M. ) each operating day and refrigerated\*. A PVSC representative may pick up this sample during the day. Any sample not picked up by PVSC may be discarded at the end of that day.

\* Composite sample of 3 outlets to be available.

C. EFFLUENT LIMITATIONS, MONITORING AND COMPLIANCE REQUIREMENTS

1. During the period beginning ( 1-12-82 ) and lasting through ( 1-12-87 )  
the permittee is authorized to discharge from outlet(s) number (ed) (20402051-41900-0201)

Such discharges shall be monitored by the permittee as specified below.

Permittees # for Outlets 1, 3, 4. Volume discharged to be determined from water consumption data including well, less 5% credit for evaporation.

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	<del>10XDAY</del> AVERAGE	<del>DAYLXMAXX</del>	MEASUREMENT FREQUENCY	SAMPLE TYPE	REPORTING PERIOD
BOD (0510)	X X X X X X X	X X X X X X X	WEEKLY	24 Hr. Comp.	QUARTERLY
TSS (0530)	X X X X X X X	X X X X X X X	WEEKLY	24 Hr. Comp.	QUARTERLY
VOLUME	X X X X X X X	X X X X X X X	X X X X X X X	X X X X X X	QUARTERLY

832/8016473

045990217

**C. EFFLUENT LIMITATIONS, MONITORING AND COMPLIANCE REQUIREMENTS**

1. During the period beginning ( 1-12-82 ) and lasting through ( 1-12-87 )  
the permittee is authorized to discharge from outlet(s) number (ed) (20402052-41900-0201)

Such discharges shall be monitored by the permittee as specified below.  
Permittees # for Outlet #2. Sanitary waste only to be discharged from this outlet. Volume  
to be determined from water consumption data.

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30XDAY AVERAGE	DAILY MAX	MEASUREMENT FREQUENCY	SAMPLE TYPE	REPORTING PERIOD
BOD (0310)	X X X X X X X	X X X X X X X	N/A*	N/A*	X X X X X X X
TSS (0530)	X X X X X X X	X X X X X X X	N/A*	N/A*	X X X X X X X
VOLUME	X X X X X X X	X X X X X X X	X X X X X X X	X X X X X X X	QUARTERLY
* Concentration for User Charge to be determined from Residential Strength.					

845990218

832/8016474

2. In addition to the monitoring required in Section C.1. the Permittee is required to meet the following schedule of compliance:

A. 1-12-82      Outlet #5 to be combined with Outlet #4.

---

1-18-82      Commence daily sampling.

B. When final pretreatment standards are promulgated, Permittee shall review baseline report in the light of the final regulation. If changes in compliance schedule are deemed necessary, Permittee shall re-submit baseline report in accordance with CFR 403.12 and any subsequent revisions.

**D. Monitoring and Reporting**

1. Monitoring results obtained during the previous ( 3 ) months shall be reported on the designated Discharge Monitoring Report, PVSC Form MR-1 or 2, postmarked no later than the (15th ) day of the month following the completed reporting period. The first report is due on ( 4/15/82 ). Properly signed reports required herein shall be submitted to PVSC at the following address:  
  
Chief Engineer  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105
2. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.
3. Test Procedures  
  
Test procedures for the analysis of pollutants shall conform to regulations contained in the PVSC Rules and Regulations, Federal, State and local laws or regulations.
4. Recording of Results  
  
For each measurement of a sample taken pursuant to the requirements of this permit, the permittee shall maintain a record of the following information:
  - a) The date, exact place and the time of sampling;
  - b) The dates the analyses were performed;
  - c) The person(s) who performed the analysis;
  - d) The analytical techniques or methods used; and
  - e) The results of all required analyses.

832/8016476

045990220



#### 5. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the locations (s) designated herein more frequently than required by this permit, using the approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Forms, (IVSC Form MR-1 or MR-2). Such increased frequency shall also be indicated.

#### 6. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of ( 5 ) years.

#### 7. Definitions

a. The "30 day average" discharge means the average of daily values for 30 consecutive monitoring days. For the purpose of enforcement of Pretreatment Standards, consecutive samples taken and analyzed shall be considered as being taken on consecutive days even though one or more non-sampling days intervene. In applying the Pretreatment Standards where more than one but less than 30 samples have been taken and analyzed during any month, a formula, specified by USEPA, will be used to calculate the "30 day average".

b. The "daily Maximum" discharge means the highest discharge by weight or other appropriate units, as specified herein, during any calendar day.

c. "Daily" - each operating day.

d. "Weekly" - one day each week during a normal operation day.

e. "Monthly" - one day each month during a normal operating day.

f. "Composite" - a combination of individual samples obtained at regular intervals over the entire discharge day.

The volume of each sample shall be proportional to the discharge flow rate unless specifically modified by PVSC. For a 24 hour continuous discharge, a minimum of 24 individual samples shall be collected at equal intervals and at least once per hour. For continuous discharges of 12 to 24 hours, individual samples shall be taken at equal intervals and at least once per hour. For continuous discharges of less than 12 hours, individual samples shall be taken at least once every 30 minutes. For discharges which are not continuous, individual samples shall be taken such that they will be representative of plant waste.

- g. "Grab" - an individual sample collected in less than 15 minutes.
- h. "Quarterly" - every three (3) months.
- i. "N/A" - not applicable.

E. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or modification which will result in new, different, or increased discharges of pollutants must be reported by submission of a new PVSC Sewer Connection Application or, if such changes will not violate the effluent limitations specified in this permit, by notices to PVSC of such changes. Following such notices, the permit may be modified to specify and limit any pollutants not previously limited.

832/8016478

845990222

## 2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall notify PVSC within 24 hours of the occurrence. If this report is made orally, a written report containing the following information, shall be submitted within five (5) working days:

- a. a description of the discharge and the cause of the period of noncompliance;
- b. the period of noncompliance, including exact dates and times, or, if not corrected, the anticipated time the noncompliance is expected to continue, and
- c. the steps being taken to reduce, eliminate and prevent a recurrence of the noncomplying discharge.

## 3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all pretreatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

## 4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the PVSC Treatment Works resulting from non-compliance with any pretreatment limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. This condition in no way affects PVSC's right to suspend a permit in order to stop a discharge which presents an imminent or substantial hazard to the public health, safety or

welfare to the local environment or which interferes with the operation of the PVSC Treatment Works.

5. Removed Substances

Solids, sludges, filter backwash or other pollutants or hazardous waste removed in the course of pretreatment or control of wastewater and/or the treatment of intake waters shall be disposed of in accordance with applicable Federal, State and local laws and regulations. Records documenting such disposal shall be made available to PVSC for review upon request.

F. MANAGEMENT RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the authorized representatives of PVSC, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring methods required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall, in writing, notify the succeeding owner or controller of the existence of this permit, and the need to apply for a new permit, a copy of which shall be forwarded to PVSC.

### 3. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, or revoked in whole or in part during its terms for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

### 4. Toxic Pollutants

Notwithstanding ( Section C ), above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition), is established under Section 307 (b) of the Federal Water Pollution Control Act (the Act), its amendments, or any other subsequent law or regulation, for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

### 5. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

### 6. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to

any applicable State Law or regulation under authority preserved by Section 510, of the Federal Water Pollution Control Act. (The Act)

7. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

8. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.



**CFM INCORPORATED**

P.O. BOX 584 FAR HILLS, NJ 07931 (201) 234-0234

— ENVIRONMENTAL ENGINEERING SERVICES

March 9, 1982

City of Newark  
920 Broad Street  
Newark, New Jersey 07102

Attention: Mr. Alvin L. Zach  
City Engineer

Re: Westinghouse - Relay Division - Sewage Monitoring Systems

Gentlemen:

The Westinghouse Electric Corporation - Relay Division has been ordered by the Passaic Valley Sewerage Commissioners to monitor the waste being discharged to the City of Newark sanitary sewer system. The permit obtained from the Commissioners requires the sampling of flow from four principal discharges to the City system. Discharge No. 1 is to a city sewer on University Boulevard, the sampling of which will be accomplished within the Westinghouse complex. The second discharge is to a city sewer on Orange Street and will be sampled within the Westinghouse complex. The remaining two connections discharge to a city sewer on Lackawanna Avenue. The sewer on Lackawanna Avenue terminates near High Street and services only the Westinghouse complex in the vicinity of the connection of the two discharge sewers. Accordingly, and to facilitate the sampling of these two lines, it has been proposed that a sampling system be installed in a city manhole downstream of the connection of these two sewers to allow the sampling of their combined flow.

CFM Incorporated has been retained by the Westinghouse Electric Corporation - Relay Division to design, install and maintain the aforementioned sampling systems. In this regard we have prepared the attached plans showing the proposed means of sampling at all four locations. We would appreciate your review and approval of the proposed sampling system identified as Location No. 4 (Sheet No. 2). The

832/8016465

845990227



**CFM INCORPORATED**

City of Newark  
March 9, 1982  
Page 2

system proposed includes the installation of an automatic sampler within the Westinghouse complex, the installation of an underground galvanized conduit from the Westinghouse complex to a city manhole located nearby in the sidewalk area of Lackawanna Avenue, and the installation of a sampling system within the manhole generally as shown on the plan. The system as proposed would necessitate little modifications to the city manhole and would be non-obstructive to flow. Proper seals would be included to prevent gas from the sewer system entering the Westinghouse complex, and all electrical components would be located within the complex. Samples would be obtained through a vacuum purge system. Under our maintenance contract with Westinghouse, we would inspect and clean the system (if required) at regular intervals to insure that no materials were trapped on the sampling hose causing blockage, etc.

We would appreciate your comments on this system if any and your approval for the use of the City of Newark manhole for sampling purposes and for construction within the sidewalk area of Lackawanna Avenue. We will retain a subcontractor to install the conduit and to restore the sidewalk. Permits for this work will be obtained by him as you may require.

Westinghouse is anxious to proceed with the installation of this facility as soon as possible. Your early review in this regard is most appreciated.

Very truly yours,

CFM INCORPORATED



John J. Flood, P.E.

JJF:h1  
Enclosures

cc: Mr. Peter S. Safran  
Westinghouse Electric Corp.

832/8016466

845990228



# Newark

Kenneth A. Gibson  
Mayor

## Department of Engineering

920 Broad Street  
Newark, New Jersey 07102  
201 733-8520

Alvin L. Zach, P.E.: L.S.  
Director

March 17, 1982

Mr. John J. Flood, P.E.  
CFM Incorporated  
P.O. Box 584  
Far Hills, New Jersey 07931

Re: Westinghouse-Relays Division; Sewage Monitoring Systems

Dear Mr. Flood:

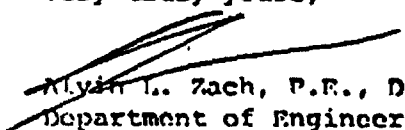
We are in receipt of your correspondence dated March 9, 1982 concerning the referenced matter. We have no objections to the concepts presented in your letter. We would prefer that all sample points be located on Westinghouse property, but as long as the owners accede to the following requirements the proposed arrangement is permissible.

- 1) Westinghouse Electric Corporation must accept the fact that the existing sewer in Lackawanna Avenue is a public combined sewer. The possibility is remote that new storm or sanitary sewer will be connected into this sewer, however, the city reserves the sole right of permitting such new connections. If such connections were made, they might compromise the effectiveness of the proposed sampling system.
- 2) In order to install the sampling apparatus in the city right-of-way and sewer, the company must formally request an easement, stating the purpose of the easement, and include a notes and bounds description with survey drawing prepared by a licensed surveyor. In addition, the existing drawing number two must be revised to show the location of all other utilities that are in the vicinity of the proposed installation.
- 3) The company must agree to sign a "Hold-Harmless" agreement in a form to be supplied by the city wherein Westinghouse shall agree to assume all liability that may arise by reason of their use of a municipal sewer.
- 4) The company must agree to have insurance in types and amounts agreeable to the municipal corporation counsel.

If your client wishes to proceed under the above conditions, please so notify us.

Very truly yours,

832/8016558

  
Alvin L. Zach, P.E., Director  
Department of Engineering

845990229

ALZ/RN/sh



**Westinghouse  
Electric Corporation**

**Switchgear Divisions**

**Relay-Instrument Division**

**95 Orange Street  
Newark New Jersey 07101  
(201) 485 0222**

**April 1, 1982**

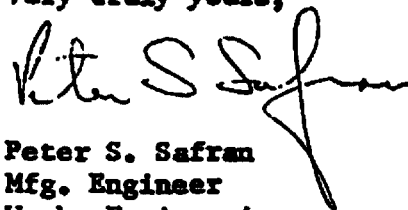
**Mr. Alvin L. Zach, P.E. Director  
Department of Engineering  
920 Broad Street  
Newark, New Jersey 07102**

**Subject: Westinghouse Relay-Instrument Division  
Sewage Monitoring System**

**Dear Mr. Zach:**

We are reviewing a copy of your letter to CFM Incorporated concerning sewage sampling. So that we may make a full evaluation, will you please send us your specific requirements of points 3 and 4 of your letter, that is, the Hold-Harmless agreement and the types and amounts of insurance required including the specific documents involved.

**Very truly yours,**



**Peter S. Safran  
Mfg. Engineer  
Works Engineering**

**PSS:jtc**

**Enclosure**

**832/8016559**

**045990230**

CITY OF



NEWARK, N. J.

FRANK D'ASCENSIO  
CITY CLERK

**PRIVILEGED**

September 17, 1982

Westinghouse Electric Corporation  
95 Orange Street  
Newark, New Jersey 07102

Gentlemen

At its regular meeting of September 15, 1982, the Municipal Council adopted on First Reading "ORDINANCE GRANTING PERMISSION TO THE WESTINGHOUSE ELECTRIC CORPORATION WITH OFFICES AT 95 ORANGE STREET, NEWARK, NEW JERSEY, TO CONSTRUCT AND MAINTAIN AT ITS OWN EXPENSE, A SEWER MONITORING SYSTEM IN LACKAWANNA AVENUE ALL WITHIN AN EASEMENT APPROXIMATELY FIVE FEET WIDE AND 18.5 FEET LONG." which is to be on Second Reading at the meeting of October 6, 1982.

The Council requested that I correspond with you and ask that you share the results from this monitoring system with the City of Newark.

Thank you in advance for your consideration in this matter.

Very truly yours

*Frank D'Ascensio*

City Clerk

6Fk 091582

DFd

cc: Members of the Municipal Council

*OK to give City copies of Discharge Monitoring Report. 10/28/82*

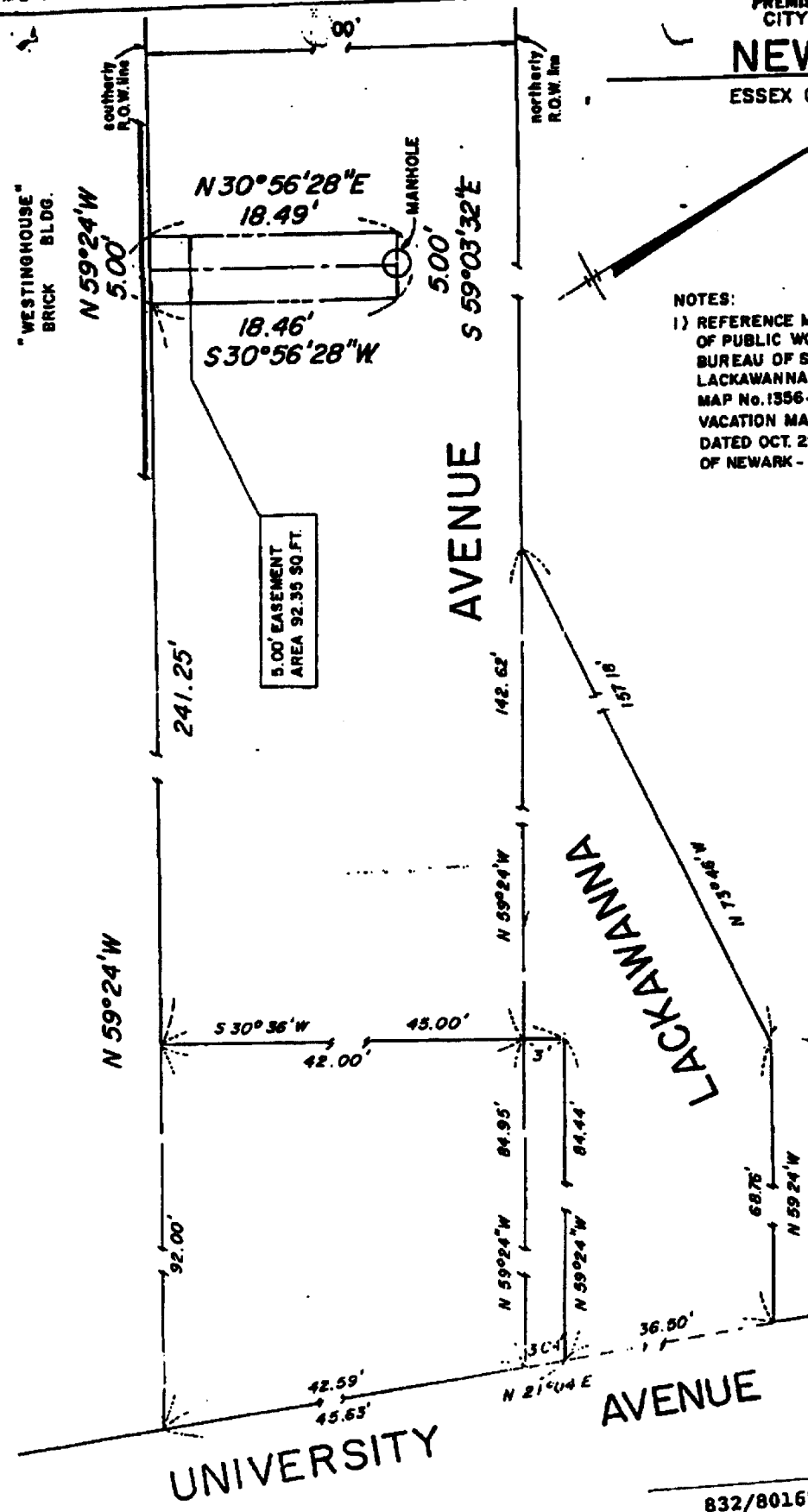
832/8016524

845990231

PREMISES IN  
CITY OF  
**NEWARK**  
ESSEX COUNTY, N.J.

**PRIVILEGED**

NOTES:  
1) REFERENCE MAP ENTITLED "DEPT.  
OF PUBLIC WORKS, NEWARK, N.J.  
BUREAU OF STREETS & SIDEWALKS  
LACKAWANNA AVE. - DEDICATION  
MAP No. 1356-O (A-1253) AND  
VACATION MAP No. 1538-V (A-1253)"  
DATED OCT. 29, 1956, FILED IN CITY  
OF NEWARK - ENGINEERS' OFFICE.



DATE: MARCH 25, 1982

SCALE: 10 FT. = 1 INCH

**845990232**

**RICHLAN, LUPO & PRONESTI**  
LAND SURVEYORS  
*Frank A. Lupo* LIC NO 14814  
470 ROSEVILLE AVENUE  
NEWARK, N.J. 07107

832/8016537

DESCRIPTION OF 500 FOOT LACKAWANNA AVENUE

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF LACKAWANNA AVENUE, SAID BEGINNING POINT BEING DISTANT THE FOLLOWING COURSES FROM THE INTERSECTION OF THE PRESENT SOUTHERLY LINE OF LACKAWANNA AVENUE WITH THE WESTERLY LINE OF UNIVERSITY AVENUE; THENCE

PRIVILEGE

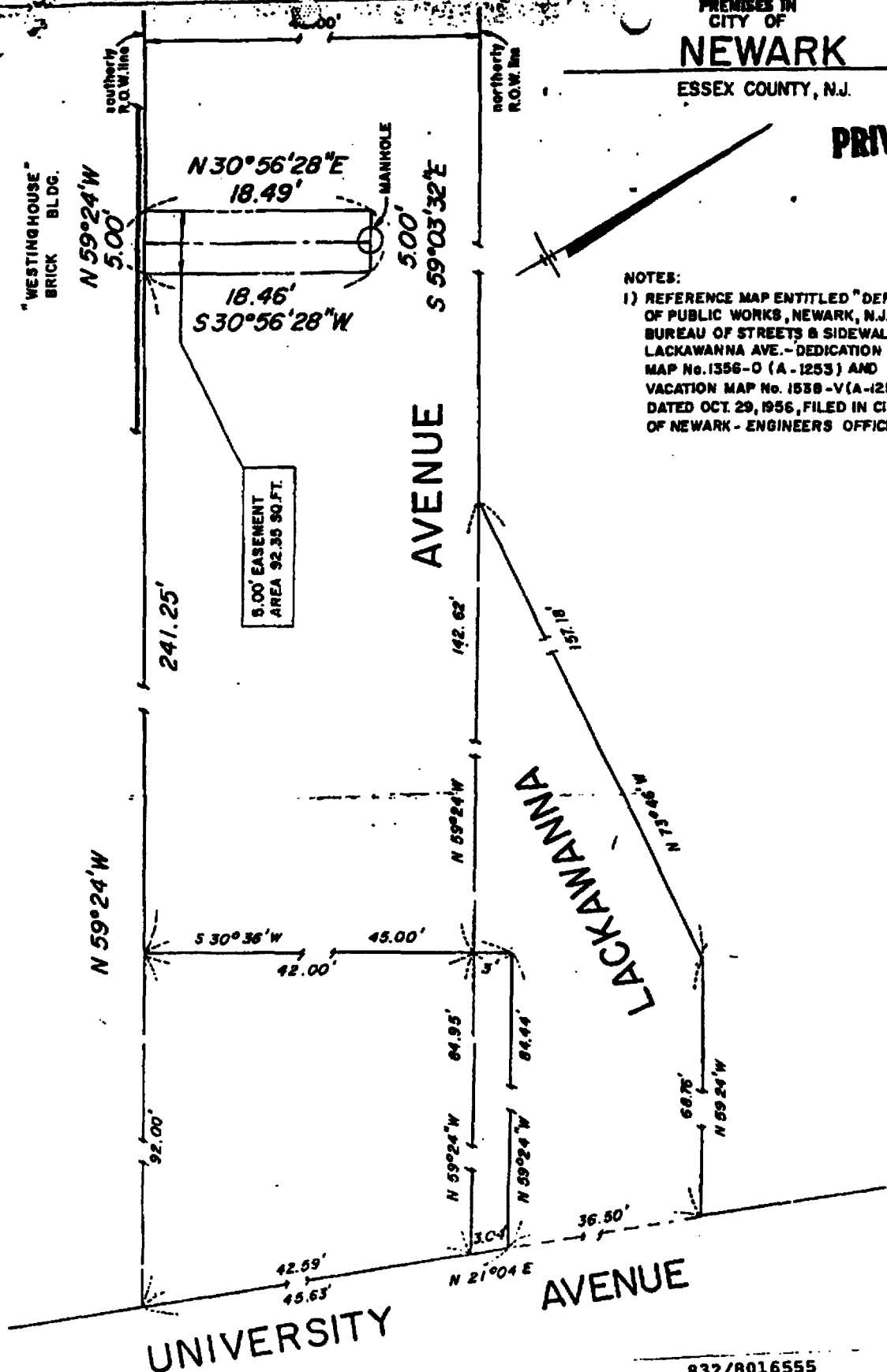
- a) ALONG THE SOUTHERLY LINE OF LACKAWANNA AVENUE NORTH 59 DEGREES 24 MINUTES WEST, 84.44 FEET TO A ANGLE POINT; THENCE
- b) STILL ALONG SAID LACKAWANNA AVENUE, SOUTH 30 DEGREES 36 MINUTES WEST, 45.00 FEET TO A ANGLE POINT; THENCE
- c) STILL ALONG SAID LACKAWANNA AVENUE, NORTH 59 DEGREES 24 MINUTES WEST, 241.25 FEET TO THE POINT OF BEGINNING; THENCE
- 1) ALONG THE SOUTHERLY LINE OF LACKAWANNA AVENUE, NORTH 59 DEGREES 24 MINUTES WEST 5.00 FEET TO A POINT
- 2) NORTH 30 DEGREES 56 MINUTES 28 SECONDS EAST, 18.49 FEET TO A POINT
- 3) SOUTH 59 DEGREES 03 MINUTES 32 SECONDS EAST, TO AND THROUGH THE CENTER OF A MANHOLE, 5.00 FEET TO A POINT
- 4) SOUTH 30 DEGREES 56 MINUTES 28 SECONDS WEST, 18.49 FEET TO THE POINT AND PLACE OF BEGINNING

832/8016538

845990233

**PRIVILEGED**

1) REFERENCE MAP ENTITLED "DEPT. OF PUBLIC WORKS, NEWARK, N.J. BUREAU OF STREETS & SIDEWALKS LACKAWANNA AVE. - DEDICATION MAP No. 1356-O (A-1253) AND VACATION MAP No. 1538-V (A-1253)" DATED OCT. 29, 1956, FILED IN CITY OF NEWARK - ENGINEER'S OFFICE.



832/8016555

**645990234**

**RICHLAN, LUPO & PRONESTI**

LAND SURVEYORS  
*James A. Lupo* LIC NO 14814  
 470 ROSEVILLE AVENUE

# DESCRIPTION OF 5.00 FOOT EASEMENT

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF LACKAWANNA AVENUE, SAID BEGINNING POINT BEING DISTANT THE FOLLOWING COURSES FROM THE INTERSECTION OF THE PRESENT SOUTHERLY LINE OF LACKAWANNA AVENUE WITH THE WESTERLY LINE OF UNIVERSITY AVENUE; THENCE

PRIVILEGE

- a) ALONG THE SOUTHERLY LINE OF LACKAWANNA AVENUE NORTH 59 DEGREES 24 MINUTES WEST, 84.44 FEET TO A ANGLE POINT; THENCE
- b) STILL ALONG SAID LACKAWANNA AVENUE, SOUTH 30 DEGREES 36 MINUTES WEST, 45.00 FEET TO A ANGLE POINT, THENCE
- c) STILL ALONG SAID LACKAWANNA AVENUE, NORTH 59 DEGREES 24 MINUTES WEST, 241.25 FEET TO THE POINT OF BEGINNING; THENCE
- 1) ALONG THE SOUTHERLY LINE OF LACKAWANNA AVENUE, NORTH 59 DEGREES, 24 MINUTES WEST, 5.00 FEET TO A POINT
- 2) NORTH 30 DEGREES 56 MINUTES 28 SECONDS EAST, 18.49 FEET TO A POINT;
- 3) SOUTH 52 DEGREES 03 MINUTES 32 SECONDS EAST, TO AND THROUGH THE CENTER OF A MANHOLE, 5.00 FEET TO A POINT;
- 4) SOUTH 30 DEGREES 56 MINUTES 28 SECONDS WEST, 18.49 FEET TO THE POINT AND PLACE OF BEGINNING



Westinghouse Electric Corporation

Measurements Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 461-4654

April 8, 1982

**PRIVILEGED**

Passaic Valley Sewerage Commission  
600 Wilson Avenue  
Newark, New Jersey 07105

Attn: Mr. Frank P. D'Ascensio, Supt. Ind. Waste Control

Dear Mr. D'Ascensio:

This is to advise you that our sewage sampling installation is being delayed while clearance is obtained from the City of Newark for putting a sampling tube into their sewer. We anticipate no problems but preparing the necessary information for submittal, and getting the eventual approval, may take some time. Our contractor, CFM Incorporated, is ready to finish the installation as soon as the required permits are at hand.

Sincerely,

Peter S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

cc: Mr. Mario Graglia

832/8016436

845990236



1034 Gateway  
235-3846  
May 17, 1982

**PRIVILEGED**

1024 GATEWAY

F. S. Anthony

1676 GATEWAY

A. Wood

cc: P. S. Safran, Newark RID

Relay Instrument Division, Newark must sample its outfalls which go to the Passaic Valley Sewage Authority. Two of these outfalls combine in a Newark City sewer which presently carries only the flow from these two outfalls. The Newark plant would like to sample the two outfalls after they have combined. This would eliminate one sampling point and be less expensive. To do so will require cutting into a city sidewalk in order to lay a line into a presently existing manhole. The sewer is an open sewer, therefore the only other work which would be performed by Westinghouse to install the sampling line would be to install brackets to support the line inside the sewer. The sampling equipment would be on Westinghouse property.

Attached is Mr. Safran's letter with attachments which include a draft ordinance, a legal description of the proposed easement and a copy of the RIF plant property description.

Would you please review and advise Mr. Safran on this matter. A review as soon as possible would be appreciated because the sampling was originally scheduled to have begun by now.

If you have any questions or comments, please give me a call.

*Michele E. Gutman*  
Michele E. Gutman  
Attorney

DE C:dmr:1519C

Attachments

832/8016545

845990237



Westinghouse Electric Corporation

Measurements Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 465-0

. June 25, 1982

**PRIVILEGED**

Mr. Vincent Olivo  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

Dear Mr. Olivo:

This is to confirm our phone conversation of June 22, 1982. Although we did move some activities to Florida, we have no plans to close this plant.

As to our sampling, sample points 4 and 5 are combined but in order to pull samples we must run a small pipe across less than 20' of sidewalk. The City of Newark has requested various documents and certification of insurance before it would grant the necessary easement. It appears the legal questions have been resolved and we are in the process of submitting the paperwork to the City. I am not familiar with how much time the City of Newark may take to process and approve the documents required.

Very truly yours,

Peter S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

832/8016433

845990238

# Newark

Kenneth A. Gibson  
Mayor

**Department of Engineering**

920 Broad Street  
Newark, New Jersey 07102  
201 733-8520

Alvin L. Zach, P.E.; L.S.  
Director

**PRIVILEGED**

November 12, 1982

Peter S. Safran, Mfg. Engineer  
Westinghouse Electric Corporation  
95 Orange Street  
Newark, New Jersey 07101

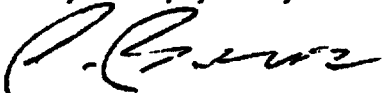
Re: Sewage Monitoring System

Dear Sir:

Enclosed is a copy of Ordinance 6S & FF dated October 6, 1982, authorizing an easement for the referenced facility. Please note that under Section 5, the Westinghouse Electric Corporation must formally accept the terms of this ordinance. We request that you advise of your acceptance in the immediate future.

Determination of the costs of publication and recording fee are still underway. Should you formally accept the provisions of the ordinance, an itemized bill will be forwarded to you.

Very truly yours,



Robert Benz,  
Principal Environmental Specialist

RB/lrm

201 733 - 8820

832/8016499

845990239

SEP 15 1982

No. 6FK 1st Reading

## Ordinance

No. 6SFF 2nd Edg. and Final Passage

OCT 06 1982

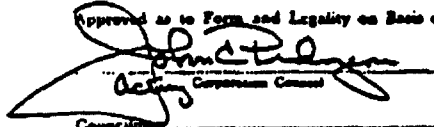
of the  
City of Newark, N. J.SH 090182  
CFK 091582  
WHSFF 100182

Date

Date to Mayor 10-7-82Date Returned 10-12-82Date Resubmitted  
to Council

Approved as to Form and Legality on Basis of Facts Set Forth

Factual contents certified to by

  
Acting Corporation Counsel

Title

Presents the following Ordinance:

PRIVILEG

AN ORDINANCE GRANTING PERMISSION TO THE WESTINGHOUSE ELECTRIC CORPORATION WITH OFFICES AT 95 ORANGE STREET, NEWARK, NEW JERSEY TO CONSTRUCT AND MAINTAIN AT ITS OWN EXPENSE, A SEWER MONITORING SYSTEM IN LACKAWANNA AVENUE ALL WITHIN AN EASEMENT APPROXIMATELY FIVE FEET WIDE AND 18.5 FEET LONG.

BE IT ORDAINED BY THE MUNICIPAL COUNCIL OF THE CITY OF NEWARK, NEW JERSEY:

Section 1. That permission is hereby granted to the Westinghouse Electric Corporation to construct and maintain at its own expense and cost, a Sewage Monitoring System within and beneath Lackawanna Avenue as laid out 42 feet in width on the Map of the Commissioners to lay out streets, avenues and squares all within a 5.0 feet wide easement as shown on the drawing entitled "Proposed Sewage Sampling Systems, Westinghouse Electric Corporation, Newark, New Jersey", dated 7/7/82 and prepared by John J. Flood, P.E., of the firm of CFM, Incorporated, P.O. Box 584 Far Hills, New Jersey, and a survey entitled "Easement for Sewer Monitoring System for Westinghouse Corporation, Newark, New Jersey", dated March 25, 1982, prepared by Gerard A. Lupo, L.S., of the firm of Richlan, Lupo & Pronesti, Land Surveyors, 470 Roseville Avenue, Newark, New Jersey.

Section 2. That the easement is more fully described as:

BEGINNING at a point in the southerly line of Lackawanna Avenue, said point being distant the following courses from the intersection of the present southerly line of Lackawanna Avenue with the westerly line of University Avenue; thence running

- a) Along the southerly line of Lackawanna Avenue North 59 degrees 24 minutes West, 84.44 feet to an angle point; thence
- b) Still along said Lackawanna Avenue, South 30 degrees 39 minutes West, 45.00 feet to an angle point; thence
- c) Still along said Lackawanna Avenue, North 59 degrees 24 minutes West, 241.25 feet to the point of BEGINNING of easement; described as follows:
  - 1) Along the southerly line of Lackawanna Avenue, North 59 degrees 24 minutes West, 5.00 feet to a point; thence
  - 2) North 30 degrees 56 minutes 28 seconds East, 18.49 feet to a point; thence
  - 3) South 59 degrees 03 minutes 32 seconds East, to and through the center of a manhole, 5.00 feet to a point; thence
  - 4) South 30 degrees 56 minutes 28 seconds West, 18.46 feet to the point and place of BEGINNING, containing 92.35 square feet.

Section 3. That such permission be and is hereby given upon the condition and provision that the said Westinghouse Electric Corporation, its successors and assigns, shall indemnify and save harmless the City of Newark, its officers, agents and servants from any claim whatsoever, arising from or in any way connected with the granting of said privilege or by reason of the installation, location, maintenance or the existence of such sewage monitoring system in the above described 5.0 foot wide easement in Lackawanna Avenue and shall agree to assume, on behalf of the City of Newark, the defense of any action of law or injury which may be brought against the City upon the claims.

CITY OF NEWARK  
CLERK  
1982 AUG 20 PM 1:15

845990240

832/8016500

84 090182

No. 654FFPage 2 of 3Date OCT 06 1982

PRIVILE

Section 4. That in addition to the aforesaid Indemnity Agreement, Westinghouse Electric Corporation, its successors and assigns, shall at its own cost and expense procure and keep in full force and effect paid up policies for Comprehensive General Liability Insurance in favor of the City of Newark, in an amount of at least \$ 100,000 covering bodily injury and property damage arising out of any one accident and \$ 200,000. for multiple occurrences, said policies to be approved by the Corporation Counsel of the City of Newark. Proof of indemnification clause in Section 3, shall be filed with the City Clerk prior to installation. Said insurance shall not be subject to cancellation or change until sixty (60) days after the City Clerk has written notice thereof as evidenced by return receipt or certified or registered letter. In the event the properties, or any part hereof, that are served by the easement do not remain in the ownership of Westinghouse Electric Corporation, the City shall be given notice thereof, and should the City find and determine that the use to which the aforesaid easement may be put may increase the hazard at the premises or affect the liability of the comprehensive coverage, the City may alter the terms of insurance as called for under this Section.

Section 5. That such permission be and is hereby given upon the condition that the Westinghouse Electric Corporation shall file with the City of Newark its written acceptance of the provisions of this Ordinance within thirty (30) days from the date on which it takes effect and shall pay on demand of the City of Newark the amount and cost and expense to the City for all official publications of this Ordinance as well as a recording fee.

Section 6. That such permission hereby is granted, subject to all State Laws and City Ordinances governing the said installation, maintenance and use of the sewage monitoring system.

Section 7. That the Westinghouse Electric Corporation shall be responsible for the repair of and/or damage to paving, existing utility lines either public or private and other such structures or appurtenances arising from the construction or maintenance of their facilities in the easement area.

Section 8. In the event that the sewage monitoring facilities covered by the aforesaid easement are no longer used by either the Westinghouse Electric Corporation or by its successor in title, the City of Newark shall be so notified, and it shall have the right to terminate this easement and upon such termination all rights shall revert to the City. Upon the cessation of use of the sewage monitoring facilities the Westinghouse Electric Corporation its successors and assigns shall remove the facilities and revert the easement to its original condition.

Section 9. That so long as the sewage monitoring system covered by this easement remains in existence, the obligations and performances hereunder shall run with the land and shall be binding upon the Westinghouse Electric Corporation and upon all subsequent owners of the properties served by the easement.

Section 10. The Corporation Counsel of the City of Newark is authorized in his discretion to set forth the terms of this Ordinance in an agreement to be executed by the Director of Engineering of the Department of Engineering, on behalf of the City of Newark and attested by the City Clerk who shall affix the City's seal thereto. A fully executed copy of said agreement after delivery of the original to the Westinghouse Electric Corporation shall be filed in the office of the City Clerk by the Director of Engineering.

832/8016501--

845990241

81104013

No. 654FFPage 3 of 3Date OCT 06 1982**PRIVILEGED**

Section 11. That for the rights and privileges herein granted, said beneficiary, Westinghouse Electric Corporation, shall pay to the City of Newark the sum of \$150.00 upon the passage of this ordinance, and pay annually to the City of Newark on or before 15 January of each succeeding year a user charge of \$150.00 effective January next succeeding the time when this ordinance shall become effective.

Section 12. That a copy of the aforesaid drawing entitled "Proposed Sewage Sampling Systems, Westinghouse Electric Corporation, Newark, New Jersey", dated 7/7/82 and prepared by John J. Flood, P.E., of the firm of CFM, Incorporated, P.O. Box 584, Far Hills, New Jersey is affixed hereto and made a part hereof.

Section 13. That a copy of the survey entitled "Easement for Sewer Monitoring System for Westinghouse Electric Corporation, Newark, New Jersey", dated March 25, 1982, prepared by Gerard A. Lupo, L.S., of the firm of Richlan, Lupo & Pronesti, Land Surveyors, 470 Roseville Avenue, Newark, New Jersey is affixed hereto and made a part hereof.

Section 14. This ordinance shall take effect upon adoption and publication in accordance with law.

DO NOT USE SPACE BELOW THIS LINE

RECORD OF COUNCIL VOTE ON FINAL PASSAGE											
COUNCILMAN AYE NAY N.V. A.B.				COUNCILMAN AYE NAY N.V. A.B.				COUNCILMAN AYE NAY N.V. A.B.			
BRANCH				MARTINEZ				TUCKER			
CARRINO				PAYNE				VILLANI			
JAMES				RICE				GRANT, Pres.			
✓ — Indicates Vote				A.B. — Absent				N.V. — Not Voting			

Adopted on first reading of meeting of the Council of the City of Newark, N. J. on OCT 06 1982

Approved  
By Council

*Ralph T. Grant Jr.* Council President

Recommended  
By Council

*Frank D'Ascenzo* City Clerk

Over  
Ride  
Vote

Yes

No

Yes

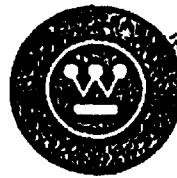
No

This Ordinance when adopted must remain in the custody of the City Clerk. Certified copies are available.  
USE REVERSE SIDE FOR POSTPONEMENT AND RECONSIDERATION DATA

CERTIFIED TO BY ME THIS  
12TH DAY OF OCTOBER, 1982

045990242

832/8016502



Westinghouse Electric Corporation

Measurements Division

95 Orange Street

Newark, N. J. 07101

Telephone: (201) 461-0111

**PRIVILEGED**

• November 23, 1982

Mr. Mario Graglia  
Supervisor of Monitoring & Surveillance  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

Dear Mr. Graglia:

This is to confirm my recent conversation with your inspector, relative to the low pH reading at our outlet #4.

It is our plan to convert an existing tank feeding that outlet to be a soda ash dispenser with an adjustable trickle valve. As sampling indicates an acidic pH more soda ash will be added, when it becomes more alkaline, soda ash will be reduced. Tank capacity is about 85 gallons. Work on the installation should commence the week of December 6, 1982.

Sincerely,

P.S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

832/8016432

845990243

THOMAS J. CIFELLI  
CHAIRMAN

RICHARD M. GIACOMARRO, SR.  
VICE CHAIRMAN

VINCENT CORRADO, SR.  
ROBERT J. DAVENPORT  
JOSEPH M. KEEGAN  
CHARLES A. LAGOS  
ISAAC THOMAS, JR.  
COMMISSIONERS

CERTIFIED MAIL

**Passaic Valley  
Sewerage Commissioners**

800 WILSON AVENUE  
NEWARK, N. J. 07105  
(201) 344-1800

CARMINE T. PERRAPATO  
EXECUTIVE DIR

CHARLES C. CA  
CHIEF C

NORMAN E. DARNST

November 24, 1982

Mr. P. Safran  
Westinghouse Corp.  
90 Orange St.  
Newark, N.J. 07101

RE: Monitoring for pH

Dear Mr. Safran:

This is in reference to the meeting held on 11/16/82 between yourself and Mr. Roselli of PVSC concerning pH results which were outside the limits specified in the PVSC Rules and Regulations. You informed Mr. Roselli that you were in the process of installing a holding tank which will be used to adjust the pH of your effluent manually prior to discharge to the sanitary sewer.

In order for PVSC to monitor the pH of your effluent and to insure that the discharge meets the limits specified in the PVSC Rules and Regulations, you are required to install a pH recorder in a suitable location. Please reply to this letter within 14 days indicating when the pH recorder will be installed and operating.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

  
Carmine T. Perrapato,  
Executive Director

CTP:dk

cc: Frank P. D'Ascensio, Supt. Ind. Waste  
Gabriel M. Ambrosio, Counsel

832/8016463

845990244

DEC 1 1982



Michael  
F.Y.I



Westinghouse Electric Corporation

Measurements Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 465-01

December 3, 1982

Mr. Carmine T. Perrapato  
Executive Director  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

Dear Mr. Perrapato:

RE: Monitoring for pH

This is in reply to your letter of November 24, 1982. Apparently, originally there was a slight misunderstanding. It is not our intention to have an effluent holding tank, rather we will use a tank to hold soda ash. Soda ash will be released from this tank to neutralize low pH going into the sewer. Mr. Frank D'Ascensio indicated that my letter, which crossed yours, did clarify this point.

In either case, we recognize your request for a pH recorder. In line with that we have contacted suppliers for some type of pH monitor/controller/recorder. It would be our intention to put the sensor for this unit into the sewer just outside of our building, where we will also take the sewerage samples.

Assuming this is acceptable to your department, we hope to have firm quotes and plans early in 1983, and we shall contact you about final installation no later than week of January 10, 1983.

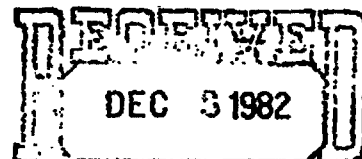
Very truly yours,

832/8016464

P.S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:jt

CC: Frank P. D'Ascensio, Supt. Ind. Waste



045990245

ENVIRONMENT



Westinghouse Electric Corporation

Relay-Instrument Division

95 Orange Street  
Newark, N. J. 071  
Telephone: (201) 1

**PRIVILEGED**

January 12, 1983

Mr. Carmine T. Perrapato  
Executive Director  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

Dear Mr. Perrapato:

RE: Monitoring for pH

We have been reviewing how best to test for and control pH of the sewer line mentioned in your letter of November 24, 1982. Our suppliers have advised us that our initial plan of sampling and controlling may not work as efficiently as hoped.

Therefore, our present plan is to take periodic samples from the sampler about to be installed (we are negotiating for a construction permit from the City of Newark). Based on pH tests from these samples, which we shall record, we will initiate a neutralizing flow to raise the pH. We shall adjust the flow and monitor the results for about a four week trial. Based on the results of this trial we shall then formulate our subsequent plans.

The date of installation is based on when the permit is obtained. We shall send you a progress report no later than the week of February 14, 1983.

Very truly yours,

P.S. Safran,  
Mfg. Engineer  
Works Engineering

PSS:rc

CC: FRANK P. D'ASENSIO, SUPT. IND. WASTE

845990246

832/8016429



Westinghouse Electric Corporation

Relay-Instrument Division

95 Orange Street  
Newark, N. J. 07101  
Telephone: (201) 465-

March 23, 1983

Mr. Carmine T. Perrapato  
Executive Director  
Passaic Valley Sewerage Commissioners  
600 Wilson Avenue  
Newark, New Jersey 07105

Dear Mr. Perrapato:

RE: Monitoring for pH

This is to advise you that the City of Newark finally granted the permit for Westinghouse to construct the connection to the sewer at sample point #4. Our contractor completed the installation and we started sewage sampling on 3-21-83.

At the same time our contractor made provisions to install the pH recorder, and he assures us it will be fully installed on or before April 30, 1983. We will notify Mr. D'Ascensio when the pH recorder is put into operation.

Very truly yours,

P.S. Safran,  
Mfg. Engineer  
Works Engineering

CC: C.J. Michelini-Westinghouse  
F.P. D'Ascensio, Passaic Valley

832/8016418

PSS:jt

845990247

**PRIVILEGED**

**RULES AND REGULATIONS  
CONCERNING DISCHARGES TO  
THE PASSAIC VALLEY  
SEWERAGE COMMISSIONERS  
TREATMENT WORKS**

832/8016298

845990248

TABLE OF CONTENTS

**PRIVILEGED**

PART I - GENERAL PROVISIONS

Section 101	Purpose and Policy
102	Administration
103	Notice
104	Inspections
105	Changes
106	Trade Secrets
107	Reconsideration and Appeal
108	Publication of Enforcement Actions

PART II - SEWERAGE CONSTRUCTION AND SEWER USE

Section 201	Approval of Plans for Construction of Connections
202	Change in Use

PART III - REGULATIONS CONCERNING INDUSTRIAL USERS

Subpart 1. Sewer Connection Permits

Section 301	Sewer Connection Permits
302	New Industrial Users
303	Existing Industrial Users
304	Renewal of Permits
305	Duration of Permits
306	Changes to Permits
307	Transfer of Permits
308	Procedure for Obtaining a Sewer Connection Permit
309	Sewer Connection Permit Conditions
310	Suspension of a Sewer Connection Permit
311	Revocation of a Sewer Connection Permit

Subpart 2. Pretreatment Regulations

Section 312	Prohibited Industrial Wastes
313	Categorical Pretreatment Standards
314	Upsets
315	Pretreatment Facilities
316	Industrial Waste Reporting
317	Industrial Waste Monitoring
318	Compliance Determination
319	Analysis of Industrial Wastes
320	Frequency of Sampling and Analysis

832/8016299

845990249

TABLE OF CONTENTS (cont'd)

**PRIVILEGED**

PART IV - USER CHARGE

Section 401	User Classes
402	Billing and Collection Responsibilities
403	Calculation of User Charges
404	Payment of User Charges
405	Change of User Class

PART V - ADMINISTRATION

Section 501	Authority, Violation, Penalties and Civil Liability
502	Savings Clause
503	Conflict
504	Effective Date

Appendix A	Definitions
Appendix B	Specific Pretreatment Limitation
Appendix C	Sample Discharge Monitoring Reports

832/8016300

845990250

**PRIVILEGED**

**PART I -- GENERAL PROVISIONS**

**SECTION 101 PURPOSE AND POLICY**

101.1 These Rules and Regulations set forth uniform requirements for Dischargers into the PVSC wastewater collection and treatment systems, and enable PVSC to protect public health in conformity with all applicable State and Federal Laws relating thereto.

The objectives of these Rules and Regulations are:

- a) to prevent the introduction of pollutants into the PVSC Treatment Works which will interfere with the normal operation of the Treatment Works or contaminate the resulting sludge.
- b) to prevent the introduction of pollutants into the publicly owned Treatment Works which do not receive satisfactory treatment by the POTW or which pass through the system into receiving waters or the atmosphere or otherwise be incompatible with the POTW;
- c) to improve the opportunity to recycle and reclaim wastewater and sludge produced by the treatment processes.

These Rules and Regulations provide for the regulation of discharges into the PVSC Treatment Works through the issuance of Sewer Connection Permits.

**SECTION 102 ADMINISTRATION**

102.1 Except as otherwise provided herein, the Executive Director of the PVSC shall administer, implement and enforce the provisions of these Rules and Regulations. Any powers granted or duties imposed upon the Executive Director may be delegated by the Executive Director to the persons acting in the beneficial interest of or in the employ of the PVSC.

SECTION 103 NOTICE

**PRIVILEGED**

103.1 Unless otherwise provided herein, any notice required to be given under these Rules and Regulations shall be in writing and served in person or by certified mail. If served by mail, the notice shall be sent to the last address known to the Director. Where the address is unknown, service may be made upon the owner of record of the property upon which the alleged violation occurred. If the written notice served in person or by certified mail is not accepted, then said notice shall be posted in a conspicuous location by or on the property upon which the alleged violation occurred.

103.2 Notice shall be deemed to have been given at the time of deposit, postage prepaid, in a facility regularly serviced by the United States Postal Service. A dated, signed receipt shall be the determinant for the acknowledgement of such notice and the start of any time limitation.

SECTION 104 INSPECTIONS

104.1 Whenever it shall be necessary for the purpose of these Rules and Regulations, the Director, upon presentation of credentials, may enter upon property or premises for the purpose of (a) copying any records required to be kept under the provisions of these Rules and Regulations or Sewer Connection Permits; (b) inspecting the plant facilities or any monitoring equipment; and (c) sampling any discharge of wastewater to the treatment works.

104.2 Authorized personnel of the PVSC shall be provided immediate access to all the facilities directly or indirectly connected to the PVSC Treatment Works during normal working hours and at such other times as may be necessary during emergencies as determined by PVSC. All users



shall provide easy access to the sewerage facility to be inspected and shall promptly remove any permanent or temporary obstruction at the verbal or written request of the Director.

**PRIVILEGED**

104.3 No person shall interfere with, delay, resist or refuse entrance to an authorized PVSC inspector attempting to inspect any facility involved directly or indirectly with a discharge of wastewater to the PVSC Treatment Works.

#### SECTION 105 CHANGES

105.1 PVSC reserves the right to promulgate changes to these Rules and Regulations in order to conform to changes in USEPA or NJDEP regulations, or where deemed necessary to comply with the objectives set forth in Section 101. Public Hearings or Public Meetings shall be conducted in accordance with USEPA Public Participation requirements which are contained in 40 CFR 25 and its subsequent changes and revisions.

#### SECTION 106 TRADE SECRETS

106.1 Any person required to furnish information to PVSC for any purpose may request that such information or any part thereof be classified as "trade secrets." In the event that such request is granted, the designated material shall be treated as proprietary information and shall not be made available for public inspection. PVSC shall have the right to forward such request to an appropriate State or Federal agency for a determination as to whether the information submitted is in fact a "trade secret." All information shall be held confidential until a determination is made by an appropriate federal and/or state agency(ies). Also, all determinations of confidentiality will be on an item by item basis such that a determination of one part of a submittal to be public information will not open up the whole submittal. In no event, however,

)

shall the physical or chemical characteristics of a user's industrial waste be classified as a "trade secret".

**PRIVILEGE**

106.2 The industrial user or his representative shall have the right to require that anyone not directly employed by PVSC sign a confidentiality agreement approved by PVSC. This agreement shall not include information concerning pretreatment facilities or discharge monitoring.

#### SECTION 107 RECONSIDERATION AND APPEAL

107.1 Any person adversely affected by any decision, action or determination made by, or on behalf of, PVSC in implementing any of the provisions of these Rules and Regulations, may request a reconsideration of such decision, action or determination. Such request shall be in writing addressed to the Director and shall be filed with the Clerk of the PVSC within ten days of the action in dispute. The request shall set forth the action being appealed, the reasons for the appeal and the proposed alternative to such action. The Director shall review the request for reconsideration and shall grant or deny the request within 10 days of its receipt. The Director shall notify all parties of record within ten days of his decision. In the event that the Director fails to act within 10 days, the request shall be deemed to be denied.

107.2 Any person adversely affected by any action of the Director in implementing any of the provisions of these Rules and Regulations may appeal said action by filing a written notice of appeal with the Clerk directed to the Chairman of the PVSC. Said notice shall be filed within ten days of the action being challenged. It shall set forth fully the action being challenged, the grounds for the appeal and the proposed alternative action requested. Said appeal shall be accompanied by a fee of \$200.00 which shall be refunded in the event that the appeal is granted. The Chairman, or any Commissioner so designated by him, shall conduct a

## **PRIVILEGED**

public hearing within 30 days of the filing of the request for appeal. The burden of proof shall be on the appellant, who may appear personally or through counsel and who shall have the right to present evidence and cross examine witnesses. All affected member municipalities shall be given 15 days written notice of the hearing and shall have the right to participate therein. Public notice of said hearing shall also be published as is required by law.

107.3 The Chairman or the Commissioner so designated by him shall issue a report of said hearing and a recommendation to the Commissioners for action on the appeal within 14 days after the completion of the public hearing. Said report and recommendations shall be acted upon by the Commissioners within 30 days thereafter. Such action shall be considered a final ruling on the appeal. No decision, action or determination of the Director shall be stayed by the appeal procedure authorized under this section.

### **SECTION 108 PUBLICATION OF ENFORCEMENT ACTIONS**

108.1 In addition to any other public participation requirements contained in 40 CFR Part 25 or its revisions, PVSC shall publish at least annually, a list of the Industrial Users which, during the previous 12 months, significantly violated applicable Pretreatment Standards or other pretreatment requirements. The list shall be published in those large daily newspapers with sufficient scope to cover the entire PVSC sewer district.

108.2 For the purpose of this provision, a significant violation is one; which remains uncorrected 45 days after notification of non-compliance, or at the expiration of a negotiated compliance schedule, which is part of a pattern of non-compliance over a 12 month period; or which involves a failure to accurately report non-compliance.

PART II — SEWERAGE CONSTRUCTION AND SEWER USE

**PRIVILEGED**

SECTION 201 APPROVAL OF PLANS FOR CONSTRUCTION OF CONNECTIONS

201.1 Direct Connection to PVSC Facility

No person, other than employees of the PVSC or persons contracted to do work for the PVSC shall connect directly to or cause to be connected directly to, or alter or cause to be altered, any PVSC owned sewer, sewage pumping station or other facility without first filing an application to construct a connection and obtaining approval of the construction plans from the Director. This application is in addition to the Sewer Connection Application required in Section 308.

201.2 Connection to Municipally Owned Collection Systems

No person shall connect to or cause to be connected to, or alter or cause to be altered, any municipally owned sewer, sewage pumping plant or other facility without first obtaining approval of the sewage construction plans as required by local ordinances. A PVSC Sewer Connection Application shall be submitted as required by Section 308.

SECTION 202 CHANGE IN USE

202.1 If a person that is not an industrial user contemplates a modification to the use of an existing sanitary sewer such that the user intends to introduce industrial wastes or discharge more than the equivalent of 25,000 gallons per day of sanitary waste, a Sewer Connection Application shall be submitted, to PVSC and, if required, a permit issued prior to the commencement of the discharge. The discharge of industrial or sanitary wastes without a Sewer Connection Permit, as stated in this section, constitutes a violation of these Rules and Regulations.

PART III -- REGULATIONS CONCERNING INDUSTRIAL USERS

**PRIVILEGED**

Subpart 1 Sewer Connection Permits

SECTION 301 SEWER CONNECTION PERMITS

301.1 Except as provided in Section 303, no industrial user shall discharge or cause to be discharged, any wastes either directly or indirectly into the PVSC Treatment Works without first obtaining a Sewer Connection Permit issued by the PVSC.

SECTION 302 NEW INDUSTRIAL USERS

302.1 New Industrial Users which desire to locate into the PVSC sewer district or existing Industrial Users which desire to commence operations at a new facility within the PVSC sewer district, shall apply for and receive a Sewer Connection Permit prior to the commencement of operations at the new facility. Although a Sewer Connection application may be submitted to PVSC at any time, PVSC shall issue a permit only after the user either procures title to the property or signs a lease agreement with the property owner.

SECTION 303 EXISTING INDUSTRIAL USERS

303.1 All Industrial Users discharging wastes directly or indirectly to the PVSC Treatment Works prior to the effective date of these Rules and Regulations are hereby granted temporary authority to discharge these wastes. This temporary authority shall expire 90 days after the adoption of these Rules and Regulations unless prior to that date the discharger has filed an application for a Sewer Connection Permit pursuant to Sections 301, 306 and 308 of these Rules and Regulations. In such case, this temporary authority shall expire on the date the Sewer Connection Permit is issued.

Any person discharging pursuant to the temporary authority provided for hereby is subject to all the provisions of these Rules and Regulations and such authority may be suspended or revoked in accordance with the terms and provisions set forth in Sections 310 and 311 of these Rules and Regulations.

**PRIVILEGED**

**PRIVILEGED**

#### SECTION 304 RENEWAL OF PERMITS

304.1 If a permittee wishes to continue discharging to the PVSC Treatment Works, he shall apply for a renewal of his Sewer Connection Permit no later than 6 months prior to the expiration date of the permit then in force. The application shall be contained in a form prepared by PVSC which will be mailed to the user no less than 9 months before the expiration date. Renewal of the permit shall be contingent upon the permittee having complied with the terms and conditions of the expired permit.

#### SECTION 305 DURATION OF PERMITS

305.1 Permits will expire as indicated in the permit (usually five (5) years). Renewal of the permit will be dependent upon compliance with the terms and conditions included in Section 304.

#### SECTION 306 CHANGES TO PERMITS

306.1 Any Industrial User that proposes to make any changes in its facility or processing which significantly affects either the quality or quantity of its discharge to the PVSC Treatment Works shall apply for an amended Permit. Forms may be procured from PVSC.

832/8016308

#### SECTION 307 TRANSFER OF PERMITS

307.1 Sewer Connection Permits are issued to a specific industrial users for a specific operation and are not transferrable. A permit shall

845990258

not be reassigned or transferred or sold to a new owner, new industrial user, or a new or changed operation. The permittee shall notify the Director within 14 days of any change in ownership or corporate structure, when such change affects responsibility for compliance with the Rules and Regulations.

**SECTION 308 PROCEDURE FOR OBTAINING A SEWER CONNECTION PERMIT**

308.1 Persons desiring a Permit to discharge shall complete a PVSC application form and forward it to PVSC. Upon receipt of all required information, the application shall be processed and if required and upon approval, a Permit shall be issued.

308.2 The application shall be approved if the applicant has complied with all applicable requirements of these Rules and Regulations and furnished to the Director all requested information, and if the Director determines that there is adequate capacity in the PVSC Treatment Works to convey, treat and dispose of the industrial wastes. The Director shall issue a permit within 45 days of receipt of all required information.

308.3 An application submitted by a corporation shall be signed by a corporate officer or other executive officer so designated. An application signed by an individual other than a corporate officer shall include a corporate resolution granting the individual the authority to make the application on behalf of the corporation. An application submitted by an industrial user other than a corporation shall be signed by a proprietor or general partner.

**SECTION 309 SEWER CONNECTION PERMIT CONDITIONS**

309.1 Sewer Connection Permits shall be issued with at least the following applicable conditions:

- a) Monitoring requirements for User Charge;
- b) Monitoring requirements for Pretreatment;

832/8016309

845990259

- c) Prohibitions and Limitations on industrial waste discharged to the sanitary sewer;
- d) Compliance schedules;
- e) Reporting requirements;
- f) Management requirements and responsibilities;
- g) Special conditions applicable to industrial users on a case by case basis.

**PRIVILEGED**

309.2 The terms and conditions of the permit may be subject to modification and change by the Director during the life of the permit, as limitations or requirements as identified in Sections 312 and 313 are modified and changed. The industrial user shall be informed of any proposed changes in his permit at least (30) days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

#### SECTION 310 SUSPENSION OF A SEWER CONNECTION PERMIT

310.1 The Director may, without formal notice, suspend a Sewer Connection Permit for a period not to exceed 45 days when such suspension is necessary in order to stop a discharge which reasonably appears to present an imminent or substantial hazard to the public health, safety or welfare of persons.

310.2 The Director may, after serving notice on the permittee, including the opportunity to respond, suspend a Sewer Connection Permit for a period not to exceed 45 days when such a suspension is necessary in order to stop a discharge which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the PVSC Treatment Works.

310.3 Any industrial user notified of a suspension of his Sewer Connection Permit shall immediately cease and desist the discharge of all



wastes regulated by that Permit. In the event of a failure of the industrial user to comply voluntarily with the suspension order, the Director shall take such steps as are reasonably necessary to insure compliance.

**PRIVILEGED**

310.4 Any suspended industrial user may file with the Director, a request for a hearing with the Commissioners. Such a request shall not stay the suspension. In the event of such request, the Commissioners shall within 14 days of the receipt by the Director of such request, hold a hearing on the suspension and shall either confirm or revoke the action of the Director. Reasonable notice of hearing shall be given to the suspended industrial user as provided for in Section 103. At this hearing the suspended industrial user may appear personally or through counsel, cross examine witnesses and present evidence in his own behalf.

310.5 In the event that the Commissioners fail to meet within the time set forth above or fail to make a determination within 72 hours after the close of the hearing, the order of suspension shall be stayed until a determination is made either confirming or revoking the action of the Director.

310.6 The Director shall reinstitute the Sewer Connection Permit upon proof of satisfactory compliance with all discharge requirements. The PVSC counsel may, upon recommendation of the Director, commence and prosecute such legal actions as may be appropriate to enforce the provisions of this Section.

#### SECTION 311 REVOCATION OF A SEWER CONNECTION PERMIT

311.1 The Commissioners may revoke a Sewer Connection Permit upon a finding that the industrial user has demonstrated a refusal, inability or failure to take reasonable steps to comply with any of the provisions of these Rules and Regulations. No revocation shall be ordered until a

) )

hearing has been held by the Commissioners, where the user shall have the right to be represented by counsel, cross examine witnesses and present evidence in his behalf. Notice of the hearing shall be given to the industrial user and to the municipality wherein the user is located, in accordance with Section 103 at least fifteen days prior to the date of the hearing.

**PRIVILEGED**

311.2 Any industrial user whose Sewer Connection Permit has been revoked shall immediately cease and desist all discharge of wastes regulated by that Permit. The Director may disconnect or permanently block from the public sewer, the connection of any industrial user whose Permit has been revoked if such action is necessary to insure compliance with the order or revocation.

311.2 Before the discharge of wastes may be commenced by the industrial user, he must apply for and receive a new Sewer Connection Permit, pay all charges, penalties and such other sums as may be owed. Costs incurred by the PVSC and Municipality in revoking the Permit and disconnecting the connection shall be paid by the industrial user before a new Permit is issued.

832/8016312

845990262

Subpart 2 Pretreatment Regulations**PRIVILEGED**SECTION 312 PROHIBITED INDUSTRIAL WASTES

312.1 No person shall discharge or deposit or cause or allow to be discharged or deposited into the Treatment Works or public sewer, any waste which causes or contains the following:

- a) Explosive Wastes. Wastes in such quantity which may create a fire or explosion hazard to the Treatment Works, collection system or to the operation of the system. Quantitative limitations on explosive wastes are specified in Appendix B.
- b) Corrosive Wastes Wastes in such quantity which will cause corrosion or deterioration of the Treatment Works. All wastes shall have a pH not less than 5. Unless otherwise stated in the Sewer Connection Permit, all wastes shall have a pH not more than 10. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride or fluoride compounds, etc.
- c) Solids or Viscous Wastes Solids or viscous wastes in amounts which would cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the Treatment Works. Prohibited materials include, but are not limited to, uncomminuted garbage, bones, hides or fleshings, cinders, sand, stone or marble dust, glass, etc.
- d) Oils and Grease (1) Any industrial wastes containing floatable fats, wax, grease or oils. (2) Any industrial wastes containing more than 100 mg/l of emulsified mineral oil or grease.
- e) Noxious Materials Noxious or malodorous solids, liquids or gases, which in sufficient quantity either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.

**PRIVILEGED**

- f) Radioactive Wastes. Radioactive wastes or isotopes of such half life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which will, or may, cause damage or hazards to the Treatment Works or personnel operating the system.
- g) Interference. Any waste, including oxygen demanding wastes (BOD etc) released in a discharge at a flow rate and/or pollutant concentration which an industrial user knows or has reason to know will interfere with the PVSC Treatment Works.
- h) Excessive Discharge Rate. Industrial wastes discharged in a slug of such volume or strength so as to cause a treatment process upset and subsequent loss of treatment efficiency.
- i) Heat. (1) Any discharge in excess of 150°F (65°C). (2) Heat in amounts which would inhibit biological activity in the PVSC Treatment Works resulting in a treatment process upset and subsequent loss of treatment efficiency.
- j) Unpolluted waters. Any unpolluted water including, but not limited to, cooling water or uncontaminated storm water, which will increase the hydraulic load on the Treatment System, except as approved by PVSC.
- k) Dilution Water. Any water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limits.
- l) Violations. Wastes which cause the PVSC treatment plant to violate its NPDES Permit, applicable receiving water standards, permit regulating sludge which is produced during treatment or any other permit issued to PVSC.
- m) Ultra Hazardous Toxics. Those wastes designated by EPA as sufficiently toxic that they shall not be discharged to the sanitary sewer in any concentrations.

)

)

SECTION 313 CATEGORICAL PRETREATMENT STANDARDS

313.1 No person shall discharge, deposit or cause or allow to be discharged or deposited into the Treatment Works or Public Sewer, any waste which violates any Pretreatment Standard. As pretreatment standards for toxic or other hazardous pollutants are promulgated by USEPA for a given industrial category, all industrial users within that category shall conform to the USEPA timetable as well as any numeric limitations imposed by USEPA. In addition, an industrial user shall comply with any more stringent standards as determined by FVSC or other agency. Pretreatment limitations established by FVSC shall be contained in Appendix B. Changes and additions shall be made as necessary from time to time by resolution of the Commissioners as per Section 105.

SECTION 314 UPSETS

**PRIVILEGED**

314.1 If for any reason, an industrial user does not comply with or will be unable to comply with any prohibitions or limitations contained either in these Rules and Regulations, Municipal Ordinance or the Sewer Connection Permit, the industrial user responsible for such discharge shall immediately notify the Director so that corrective action may be taken to protect the Treatment Works. In addition, a written report addressed to the Director detailing the date, time and cause of the accidental discharge, the quantity and characteristics of the discharge and corrective action taken to prevent future discharges, shall be filed by the responsible industrial user within five (5) working days of the occurrence of the noncomplying discharge.

314.2 An upset shall constitute an affirmative defense to an action brought for non-compliance if the following requirements are met.

- a) The industrial user shall demonstrate through relevant evidence that:

832/8016315

845990265

- )
1. An upset occurred and the industrial user can identify the specific cause(s) of the upset; and that said cause(s) were due to circumstances reasonably beyond the control of the user;
  2. The facility was at the time being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures;
  3. The industrial user has submitted the written report described in paragraph (1) above within 5 working days

**PRIVILEGED**

314.3 The industrial user seeking to establish the occurrence of an upset shall have the burden of proof.

#### SECTION 315 PRETREATMENT FACILITIES

315.1 A pretreatment facility or device may be required by the Director to treat or monitor industrial wastes prior to discharge to the public sewer or PVSC Treatment Works. Where pretreatment or construction necessary to control or monitor industrial wastes is required, prior to the issuance of, or as prescribed in the Permit, schematics, detailed plan and specifications, process descriptions and other pertinent data or information relating to such pretreatment facility or device shall first be filed with the Director. Such filing shall not exempt the user nor the facility from compliance with any applicable code, ordinance, rule regulation or order of any governmental authority or from these Rules and Regulations. Any subsequent alterations or additions to such pretreatment or flow-control facilities shall not be made without notice to PVSC and, where required, submission of detailed plans and specifications.

315.2 If inspection of pretreatment facilities and devices by authorized personnel of PVSC reveals such systems are not installed or operating in conformance with the plans and procedures submitted to PVSC,

832/8016316

645990266

or are not operating in compliance with the effluent limitations required by PVSC, the industrial user shall make those modifications necessary to meet those requirements. All pretreatment systems judged by the Director to require engineering design shall have plans prepared and signed by an engineer of suitable discipline. If pretreatment or control of waste flows is required, such facilities shall be maintained in good working order and operated as efficiently as possible by the owner or operator at his own cost and expense, subject to the requirements of these Rules and Regulations and all other applicable codes, ordinances and laws.

**PRIVILEGED**

#### SECTION 316 INDUSTRIAL WASTE REPORTING

316.1 Each industrial user shall submit a user charge quarterly self-monitoring report on forms provided by PVSC using the following schedule: first quarter, from October 1 through December 31, due January 21; second quarter, from January 1 through March 31, due April 21; third quarter, from April 1 through June 30, due July 21; and fourth quarter, from July 1 through September 30, due October 21. A report shall be submitted for each outlet as specified in the Sewer Connection Permit, and shall contain the total volume of waste discharged during the period. Individual analytical results for BOD, TSS or any other parameter as required by the Permit, shall be reported on the date that the sample was removed from the sampling device for analysis. (For example, if a sampling device drew a sample from 8:00 A.M. Monday to 8:00 A.M. Tuesday and it was removed on Tuesday for analysis, then the sample would be dated Tuesday.)

316.2 Each industrial user whose permit requires him to submit a quarterly discharge monitoring report shall submit the report in accord

B-2/8016317

845990267

with the schedule described in paragraph 316.1. The discharge report may include, but at the discretion of the Director, shall not be limited to, nature of processes, volume, rates of flow, mass discharge emission rate, production quantities, hours or days of operation, concentrations of pollutants, or other information necessary to demonstrate compliance with applicable pretreatment limitations.

**PRIVILEGED**

316.3 If an industrial user fails to submit a quarterly self-monitoring report as required by his Sewer Connection Permit, the Director shall estimate the use for that period. These estimates may be made 30 days after the due date of the report, except for the fourth quarter where the estimate may be made after October 21. If a user fails to submit a quarterly self-monitoring report and the Director estimates the usage for that period, this estimate shall become the current year actual usage for that period and no adjustments shall be made. In addition, no adjustments shall be made to the next year estimated usage if the estimate is prepared using this method.

#### SECTION 317 INDUSTRIAL WASTE MONITORING

317.1 All industrial users who discharge or propose to discharge waste to the PVSC Treatment Works shall maintain such records as are necessary to demonstrate compliance with the requirements of these Rules and Regulations, the Sewer Connection Permit and any applicable State or Federal pretreatment standards or requirements.

317.2 Such records shall be made available upon request by the Director. All such records relating to compliance with pretreatment standards shall be made available to officials of NJDEP and officials of the USEPA upon demand. A summary of such data indicating the industrial user's compliance with these Rules and Regulations shall be prepared and submitted to the Director as designated in the Permit, utilizing forms contained in Appendix (C).

317.3 Each designated industrial user shall install, at his own cost and expense, suitable monitoring equipment to facilitate the accurate observation



sampling and measurement of industrial wastes. Such equipment shall be kept safe, secure from unauthorized entry or tampering and accessible at all time.

317.4 An industrial user who claims a lower discharge volume than is indicated by his water consumption, due to; retention of water in his product, discharge to a storm sewer, river or ditch, a higher evaporation rate than is allowed by PVSC or for other reasons, shall provide PVSC with an acceptable method for accurately determining his discharge volume to the sanitary sewer. An industrial user with more than one discharge point to the sanitary sewer shall provide PVSC with accurate discharge volumes for each outlet. In the event that PVSC determines that said volumes are not accurate, the Director may require the installation of flow measuring equipment. **PRIVILE**

317.5 When more than one industrial user can discharge into a common sewer, the Director may require installation of separate monitoring equipment for each industrial user. When there is a significant difference in waste water constituents and characteristics produced by different operations of a single industrial user, the Director may require that separate monitoring facilities be installed for each separate discharge.

#### SECTION 318 COMPLIANCE DETERMINATION

318.1 Compliance determinations with respect to any Permit Prohibitions and Limitations may be made on the basis of instantaneous grab samples, sequential samples or composite samples. Sequential or composite samples may be taken over a 24 hour period, or over a longer or shorter time span, as deemed necessary by the Director, to meet the needs of specific circumstances.

318.2 PVSC may inspect the monitoring facilities of any industrial user to determine compliance with the requirements of these Rules and Regulations as specified in Section 104.

832/8016319

#### SECTION 319 ANALYSIS OF INDUSTRIAL WASTES

319.1 Laboratory analysis of industrial waste samples shall be performed

845990269

in accordance with the current edition of "Standard Methods", "Methods for Chemical Analysis of Water and Waste", published by the U.S. Environmental Protection Agency or the "Annual Book of Standards, Part 23, Water, Atmospheric Analysis" published by the American Society for Testing and Materials. **PRIVILEG** Analysis of those pollutants not covered by these publications shall be performed in accordance with procedures established by the NJDEP or other applicable agency.

SECTION 320 FREQUENCY OF SAMPLING AND ANALYSIS

320.1 Industrial wastes shall be sampled and analysed by the user for the User Charge and where required, pretreatment. The frequency of the sampling and analysis shall be specified in the Sewer Connection Permit and will vary, based on the quantity and quality of wastes discharged, as well as other factors which the Director deems appropriate.

320.2 If a permittee analyses his industrial wastes for parameters not required in the Permit or at a greater frequency than specified in the permit, these results shall also be included in the periodic monitoring reports submitted to PVSC.

832/8016320

845990270

)

)

PART IV — USER CHARGE

**PRIVILEGED**

SECTION 401 USER CLASSES

401.1 The following user classes are established in accordance with Federal Regulations: Industrial, Large Commercial, Tax Exempt and Residential/Small Commercial, PVSC reserves the right to change the class of any user as conditions warrant. See Appendix (A) for specific definitions.

SECTION 402 BILLING AND COLLECTION RESPONSIBILITIES

402.1 In order to fulfill its responsibilities under the User Charge System, PVSC shall:

- a) Collect usage data for Industrial, Large Commercial and Tax Exempt Users and municipalities;
- b) Determine the total assessment for each municipality including the amounts to be collected through ad valorem taxation and direct billing;
- c) Prepare invoices to bill each municipality for its total assessment;
- d) Develop and maintain data necessary to calculate charges and prepare invoices for each Industrial, Large Commercial and Tax Exempt User to assist municipalities in their billing and collection;
- e) Establish procedures for the billing and collection of the total charge from each municipality; and
- f) Monitor the municipal billing and collection procedures to ensure that User charges are properly billed and collected.

402.2 In order to fulfill its responsibilities under the User

Charge System, each participating municipality shall:

- a) Include the ad valorem portion of the User Charge assessment either in the development of local tax rates, or in its own approved direct billing system;
- b) Notify PVSC of any new or changes in identification for Industrial, Large Commercial or Tax Exempt Users.
- c) Establish and implement procedures for the billing and collection of the applicable charges from each Industrial, Large Commercial and Tax Exempt User.
- d) Remit total municipal assessment to PVSC.
- e) Submit listings of delinquent Industrial, Large Commercial and Tax Exempt Users to PVSC on a timely basis; and
- f) Make records available to PVSC for compliance reviews.

**PRIVILEGED**

#### SECTION 403 CALCULATION OF USER CHARGES

403.1 Except for those municipalities that have adopted an alternative method, the User Charge for the Residential/Small Commercial Class shall be based on the assessed valuation for the property as maintained in the applicable municipal tax records. Each municipality may, with the prior approval of PVSC, adopt an alternate method, such as direct billing, provided it complies with applicable Federal and State regulations.

403.2 The user charge for the Industrial Users shall be based on the user's actual volume and strength contribution to the PVSC Treatment Works during each measurement year. Strength shall be determined by the Total Suspended Solids (TSS) and 5 day Biochemical Oxygen Demand (BOD5) analytical methods. Where the Director determines that an alternative method is necessary, other test methods will be employed to determine the equivalent BOD. A direct billed user shall also receive a credit for any Ad Valorem

845990272

832/8016322

tax which may be paid as follows: In those municipalities which collect user charges from Residential/Small Commercial Users through Ad Valorem taxes, Industrial and Large Commercial Users will pay a portion of their user charge through their Ad Valorem taxes. In these municipalities the direct billed user will receive a credit against the user charge for payments included in his Ad Valorem taxes. **PRIVILEGED**

403.3 The user charge for the Large Commercial Users shall be based on the user's actual volume discharged during each measurement year, and residential strength standards as determined periodically by the Director.

403.4 Each non-industrial tax exempt user shall be placed in one of four classes based on volume for the purpose of determining their user charge. The user charge for the largest class shall be based on the user's actual volume discharged, and residential strength standards for BOD and TSS, as determined periodically by the Director. Actual volume shall be determined by the volume consumed during the measurement year, as close as can be reasonably determined.

403.5 The user charge for the remaining three tax exempt classes shall be based on the average volume consumed by a representative number of users within that class. Residential strength standards, as determined periodically by the Director, shall be used to determine the BOD and TSS contribution. All tax exempt users in each of these three classes shall receive the same user charge. Users shall be moved from one class to another based on actual volume data as determined by the Director.

The Director shall review the average volume consumed data every two years and recommend adjustments to the average volume consumed figures. The Commissioners, shall, by resolution every two years, set volume standards to apply to each of the four classes of non-industrial, tax exempt users.

SECTION 404 PAYMENT OF USER CHARGES

404.1 PVSC shall calculate the User Charges to be paid by the direct billed users as follows:

**PRIVILEGED**

- a) The user charge shall be estimated in advance for each calendar year;
- b) The estimated user charge shall be modified by any adjustments from the prior year (except in the first year of the implementation of the User Charge System);
- c) During each measurement year industrial and other designated users shall submit quarterly self-monitoring reports to PVSC. These reports will provide data to enable PVSC to calculate the actual usage for that measurement year. This will also apply where PVSC calculates the actual usage because a user fails to supply the self-monitoring report;
- d) The current year actual usage shall be compared to the current year estimated usage and any difference shall result in an adjustment to that year and be applied to the next year's estimated usage as explained in (b) above.

404.2 PVSC shall prepare invoices and mail to each municipality twice a year, one in January with full payment due in 30 days, and the other in June, with full payment due July 1. Each municipality shall remit to PVSC the entire charge. The collection from each user within the municipality shall be the responsibility of that municipality.

404.3 Municipalities shall not modify the PVSC portion of the User

845990274

832/8016324

PART V--ADMINISTRATION

**PRIVILEGED**

SECTION 501 AUTHORITY, VIOLATIONS, PENALTIES AND CIVIL LIABILITY

501.1 These Rules and Regulations are adopted pursuant to N.J.S. 58:14-35 and appropriate Federal Statutes and Municipal Ordinances.

501.2 Any violation of these Rules and Regulations including the failure to pay fees, charges, or surcharges imposed, or any conditions or limitation of a permit issued pursuant thereto shall be subject to such penalties as are provided by law. Said penalties shall be in addition to any sanctions authorized under these Rules and Regulations.

501.3 In addition to such penalties as may be provided by law, any person violating these Rules and Regulations shall be civilly liable for such damages as may result to the PVSC as a result of said violation.

501.4 Notwithstanding any other provisions of these Rules and Regulations, any Industrial, Tax Exempt or Large Commercial user who fails to comply with these Rules and Regulations shall be liable to a fine in an amount not to exceed \$50 per day for each day or part thereof that such violation exists up to a maximum of \$5000, except that any industrial user who fails to submit a quarterly self-monitoring report when due shall be liable to a fine in an amount not to exceed \$100 per day for each day or part thereof that such violation exists up to a maximum of \$5000.

SECTION 502 SAVINGS CLAUSE

502.1 If any provision, paragraph, word, section or article of these Rules and Regulations is invalidated by any court of competent jurisdiction; the remaining provisions, paragraphs, words, sections and articles shall not

845990275

832/8016320

) )  
Charge assessed to an individual user. The Director shall have the right to review municipal records to insure that proper collections are being made. Records shall be maintained for at least three years.

**PRIVILEGED**

SECTION 405 CHANGE OF USER CLASS

405.1 In order for each municipality to keep PVSC informed of all new or changed users, the following shall be submitted to PVSC in a timely manner:

- a) Name and address;
- b) Name and telephone number of the contact official;
- c) Times when facility is open and when contact official is present.

832/8016325

845990276



)

**PRIVILEGED**

be affected continue in full force and effect.

**PRIVILEGED**

SECTION 503 CONFLICT

503.1 All Rules and Regulations and parts thereof inconsistent or conflicting with any part of these Rules and Regulations are hereby repealed to the extent of such inconsistency or conflict.

SECTION 504 EFFECTIVE DATE

504.1 These Rules and Regulations shall be in full force and effect on the 12<sup>th</sup> day of August, 1982, and supersede those Rules and Regulations previously approved by PVSC. A certified copy of these Rules and Regulations shall be filed with the Municipal Clerk of each participating Municipality.

832/8016327 - -

845990277

)

)

APPENDIX A - DEFINITIONS

**PRIVILEGED**

The definitions given in this part shall be used in the interpretation of these Rules and Regulations, issuance of Permits, the making of charges for service and all other operations of these Rules and Regulations unless another meaning for the word is apparent from the context.

"ABSOLUTE LEL VALUE" \_ means the concentration of a particular combustible substance with 100% being the Lower Explosive Limit (LEL) of that substance.

"ACT" - means the Federal Clean Water Act (33 U.S.C. 1251 et seq), as amended.

"AD VALOREM TAX"- means the tax levied for the benefit of a person on the assessed value of property owned.

"ALiquot"- means a smaller sample removed from a larger sample which is totally representative of that larger sample.

"ASSESSED VALUE" - means that portion of the total value of the property upon which individual municipal taxes are levied.

"ASTM TEST METHOD" - means test procedure as contained in the publication "Annual Book of Standards, Part 23 Water Atmospheric Analysis" published by the American Society for Testing and Materials.

"BIOCHEMICAL OXYGEN DEMAND"- (5 DAY) (BOD5)- means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure contained in Standard Methods in five (5) days at 20C, expressed in terms of weight and concentration (milligrams per liter).

"CHIEF EXECUTIVE OFFICER" - means the CEO for PVSC or his designee.

832/8016328

845990278

"CHIEF ENGINEER" - means the Chief Engineer of the Passaic Valley Sewerage Commissioners or his agent or representative.

"COMBUSTIBLE" - means capable of igniting and burning.

**PRIVILEGE**

"COMPATIBLE POLLUTANT" - means biochemical oxygen demand, suspended solids, pH, fecal coliform bacteria, plus additional pollutants identified in PVSC's NPDES Permit, if the Treatment Works is designed to treat such pollutants and in fact, does remove such wastes to a substantial degree.

"COMPOSITE SAMPLES" - means those samples that are made up of a series of small individual samples obtained at regular intervals over the entire discharge day. The volume of each sample shall be proportional to the discharge flow rate.

"CONTACT OFFICIAL" - means an employee or officer of a user who has knowledge of the facility and who will normally be contacted first regarding matters contained in these Rules and Regulations.

"COOLING WATER" - means the water discharged from any use such as air conditioning, cooling or refrigeration, during which the only pollutant added to the water is heat.

"DIRECTOR" - means the Executive Director of the Passaic Valley Sewerage Commissioners or his agent or representatives.

"DISCHARGER" - means any person that discharges or causes a discharge to a public sewer.

"DOMESTIC SANITARY WASTES" - means liquid wastes, (I) from the non-commercial preparation, cooking and handling of food or (II) containing human excrement and similar matter from the sanitary conveniences of dwellings, commercial buildings, industrial facilities and institutions.

"EPA" - means the United States Environmental Protection Agency.

845990279

832/8016329

) )

"EPA TEST METHOD"- means test procedure as contained in the publication "Methods for Chemical Analysis of Water and Waste" published by the U. S. Environmental Protection Agency.

**PRIVILE**

"FACILITY"- means the geographically continuous property owned or leased by the user which may be divided by public or private right (s) of way. Geographically non-continuous property, owned or leased by the user but connected by a right of way which the user controls and to which the public does not have access, shall be considered as one facility.

"FLAMMABLE"- means easily ignitable and capable of burning with great rapidity.

"GARBAGE" - means solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of food.

"IMMEDIATE ACCESS"- means access without delay but in no event beyond 10 minutes from the time the request is made known to any guard or employee of the user.

"INCOMPATIBLE POLLUTANT"- means any pollutant which is not a compatible pollutant as defined in this appendix.

"INDUSTRIAL USER"- means any non-governmental, non-residential user which discharges more than the equivalent of 25,000 gallons per day of domestic sanitary wastes and which is identified in the Standard Industrial Classification Manual under Divisions A, B, D, E or I; or which discharges toxic pollutants into the PVSC Treatment Works.

"INDUSTRIAL WASTE"- means the liquid wastes resulting from the processes employed in industrial, manufacturing, trade or business establishments, or from the development, recovery, detoxification or processing of natural resources or other wastes as distinct from domestic sanitary wastes.

"PRETREATMENT" - means a reduction in the amount or elimination of pollutants, or the alteration of the nature of pollutant properties in industrial wastes prior to the discharge of such wastes into the PVSC Treatment Works, whether such reduction, elimination or alteration is obtained by physical, chemical or biological processes, process changes or other means.

PRIVILEGE

"PRETREATMENT STANDARDS"- means all applicable Federal Rules and Regulations implementing Section 307 of the Act, as well as any non-conflicting State, PVSC or local standards. In cases of conflicting standards or regulations, the more stringent thereof shall be applied.

"PROPERTY OWNER"- means the record title holder of the property wherein the industrial user is located.

"PUBLIC SEWER"- means any sewer dedicated to public use and whose use is controlled by a public corporation.

"PVSC"- means the Passaic Valley Sewerage Commissioners.

"RESIDENTIAL/SMALL COMMERCIAL USER"- means any user (except an industrial, large commercial or tax exempt user) that discharges the equivalent of 25,000 gallons or less per day of domestic waste.

"SEQUENTIAL SAMPLES"- means those samples gathered over an operating day, that are composed of a series of short time period samples, each of which is held in an individual container. Each individual container may itself, however, contain a composite sample.

"SEWER CONNECTION APPLICATION" - means a long or short form to be filed with the Passaic Valley Sewerage Commissioners by an industrial user or other user if requested by the Chief Engineer.

"SEWER CONNECTION PERMIT" - means a permit issued by the Chief Engineer to an industrial user, which authorizes the discharge of wastes to the sanitary sewer, subject to the conditions contained therein.

) )

"INTERFERENCE"- means the inhibition or disruption of the PVSC sewer system, treatment process or operation which causes or significantly contributes to a violation of any requirement of its NPDES permit.

PRIVILEG

"LARGE COMMERCIAL USER" - means any non-governmental, non-residential user (except an Industrial or Tax Exempt User) which discharges more than the equivalent of 25,000 gallons per day of domestic sanitary waste.

"LEL" - means the lowest concentration of a combustible substance in air through which a flame, once ignited, will continue to propagate. (Lower Explosive Limit).

"MEASUREMENT YEAR"- means, for the purpose of calculating User Charges, the period from October 1 of each year through September 30 of the following year.

"MUNICIPALITY"- means the local governmental unit wherein the industrial user is located.

"NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)" - means the Federal Program, under the Federal Water Pollution Control Act Amendments, Clean Water Act and other acts, for issuing, conditioning and denying permits for the discharge of pollutants from point sources into the navigable waters, the contiguous zone and the oceans, pursuant to section 402 of the Act.

"NJDEP" - means the New Jersey Department of Environmental Protection.

"PERSON" - means any individual, firm, company, partnership, corporation, association, group or society and includes the State of New Jersey and agencies, districts, commissioners and political subdivisions created by or pursuant to State Law.

"pH" - means the logarithm of the reciprocal of the concentration of hydrogen ions in grams per liter of solution.

SHALL" AND "MAY"- "shall" is mandatory and "may" is permissive.

"SLUG DISCHARGE"- means the discharge of industrial wastes or any constituents thereof to the PVSC Treatment Works in such quantity that the average hourly discharge over any period of two hours duration is more than twice the daily average hourly discharge of industrial wastes or constituents thereof.

PRIVILEGE

PRIVILEGED

"STANDARD METHODS" - means test procedure as contained in the publication "Standard Methods for the Examination of Water and Wastewater" prepared and published jointly by the American Public Health Association, American Water Works Association and the Water Pollution Control Federation.

"TAX EXEMPT USER"- means any user (except large commercial and industrial) which pays no Ad Valorem taxes or which receives substantial credits in paying such taxes. Publicly owned facilities which perform local governmental functions and discharge solely domestic wastes are excluded.

"TOTAL SUSPENDED SOLIDS"- means the insoluble solid matter suspended in wastewater that is separable by laboratory filtration in accordance with the procedure contained in Standard Methods.

"TOXIC POLLUTANT"- means one of the pollutants so designated by USEPA and NJDEP. This list of pollutants is subject to change from time to time by USEPA or NJDEP.

"TREATMENT WORKS"- means any devices, facilities, structures, equipment or works owned or used by the PVSC for the purpose of the transmission, storage, treatment, recycling and reclamation of industrial and domestic wastes, or necessary to recycle or reuse water including intercepting sewers, outfall sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances; extensions, improvements, remodeling, additions and alterations

) )  
thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.

**PRM**  
"UNCONTAMINATED STORM WATER" - means flow occurring during or immediately following any form of natural precipitation and resulting therefrom which does not contain any pollutants limited or prohibited by the effluent standards in effect.

"UPSET" - means an exceptional incident in which there is unintentional and temporary non-compliance with technology-based pretreatment standards because of factors beyond the reasonable control of the Industrial User. It does not include non-compliance to the extent caused by operational error, improperly designed or inadequate pretreatment facilities, lack of preventive maintenance, or careless or improper operation.

"USEPA" - means the United States Environmental Protection Agency.

"USER CHARGE" - means a charge levied on users of the PVSC Treatment Works, or that portion of the Ad Valorem taxes paid by a user, for the user's proportionate share of the cost of operation and maintenance (including replacement).

"WASTES" - means either domestic sanitary wastes or industrial wastes or both.



APPENDIX B

PRETREATMENT LIMITATION #1

**PRIVILEGE**

INTERIM MERCURY PRETREATMENT REGULATIONS

PVSC regulation concerning the discharge of mercury into the PVSC Treatment Works is as follows:

All persons discharging industrial waste directly or indirectly to the PVSC Treatment Works shall meet the following minimum standards concerning the content of mercury discharge:

The discharge of industrial wastes containing mercury into the PVSC Treatment Works is prohibited unless such discharge began prior to March 1, 1981, or a permit to discharge was issued prior to March 1, 1981. Trace quantities of mercury which are present in the intake water shall be exempt from this prohibition.

Any person permitted to discharge mercury into the PVSC treatment works under paragraph one above shall be prohibited from increasing the amount of mercury discharged at any time in the future.

No person shall discharge industrial wastes containing mercury into the PVSC treatment works from any new or modified process where permission to discharge is granted under paragraph one.

If a process, resulting in a permitted discharge of mercury as granted under paragraph one is terminated, this quantity of mercury shall not be applied as a credit to increase the discharge of mercury from any other process.

Users permitted to discharge mercury under this regulation shall be subject to a limitation of 0.40 pounds per day.

Users who must pretreat to meet the limitations contained in this regulation shall achieve compliance by December 31, 1981.

Where because of extraordinary conditions the strict application of this regulation would result in practical difficulties to or exceptional hardship upon the industrial user, the Commissioners may in their discretion grant a variance from such strict application to the extent necessary to relieve such difficulties or hardship. Such variance, however, shall not be granted unless there is a specific finding by the Commissioners that such relief can be granted without substantial detriment to the public good

or without causing PVSC to violate its NPDES permit or any other permits or regulations required by NJDEP or USEPA.

**PRIVATE**

PVSC shall require actual or potential dischargers of mercury to conduct an initial three (3) month monitoring program. This program shall begin one (1) month after adoption of this regulation. PVSC shall inform the industrial users of their individual monitoring requirements by separate correspondence. The provisions contained in this regulation shall be automatically incorporated in each applicable sewer connection permit when issued. Failure to comply with these monitoring provisions may result in a denial of a permit, revocation of an existing permit, or termination of sewer service.

The frequency of monitoring will generally follow the schedule listed below. However, PVSC reserves the right to modify the schedule on a case by case basis.

- a) Users that discharge 0.20 lbs. or more of mercury on any day:
  - analyze a representative daily composite sample of industrial waste for mercury twice per week for 13 consecutive weeks.
- b) Users that discharge 0.02 lbs. or more, but less than 0.2 lbs. of mercury on any day: - analyze a representative daily composite sample for mercury once each week for 13 consecutive weeks.
- c) Users that discharge less than 0.02 lbs. of mercury on any day: - analyze a representative daily composite sample for mercury twice a month for 3 consecutive months.
- d) A one quart aliquot of each sample to be analyzed shall be acidified to a pH of 2 or less with concentrated nitric acid, and shall be set aside for PVSC. When the next scheduled sample is taken, the previous aliquot may be discarded if PVSC has not picked it up.

832/8016336

645990286

**PRIVILEGE**

NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 FACILITY LOCATION \_\_\_\_\_

PERMIT NUMBER
---------------

MONITORING PERIOD					
			TO		
DATE	MO	YEAR		DATE	MO
					YEAR

FROM

845990287

PARAMETER & NUMBER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			FREQ. OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM		
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								
	SAMPLE MEASUREMENT								
	PERMIT REQUIREMENT								

832/8016337

USE REVERSE SIDE FOR COMMENTS AND REPORTS OF ANY VIOLATIONS

PVSC FORM MR-1 6/79

SIGNATURE OF PRINCIPAL EXECUTIVE OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.	DATE
--	---------------------	---------------	------

845990288

ADDRESS: \_\_\_\_\_

FACILITY LOCATION: \_\_\_\_\_

OUTLET DESIGNATION (17 DIGITS)
--------------------------------

MONITORING PERIOD					
MON.	DAY	YR.	MON.	DAY	YR.
START			END		

(CU. FT. X 7.48 = GALS.)
VOL. DISCHARGED THIS PERIOD

DATE																		
BOD (mg/l)	0310																	
TSS (mg/l)	0530																	

832/8016338

DATE																		
BOD (mg/l)	0310																	
TSS (mg/l)	0530																	

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.	DATE
---	---------------------	---------------	------

**PRIVILEGED**

316.4 All industrial users subject to Federal Categorical Pretreatment Standards shall, at a minimum comply with the reporting requirements contained in 40 CFR 403.12 and subsequent revisions, including, but not limited to, Baseline Monitoring Reports, Compliance Progress Reports, Compliance Date Reports and Periodic Self-Monitoring Reports.

832/8016295

CHANGE 1 - 4/28/83

845990289

## RECORD OF CHANGES

[illegible]

**845990290**

**PRIVILEGED**

**CHANGE NOTICE TO RULES AND REGULATIONS CONCERNING  
DISCHARGES TO THE PASSAIC VALLEY SEWERAGE COMMISSIONERS  
TREATMENT WORKS.**

- (1) DELETE THE WORD "DIRECTOR" WHERE APPEARING  
AND SUBSTITUTE THE WORD "CHIEF EXECUTIVE  
OFFICER".**

832/8016297

845990291

82-1-00-1595

**PRIVILEGED**

--1634 Gateway  
235-3846  
August 26, 1983  
Newark Sewage Sampler Easement

1643 GATEWAY

D. H. Posy

cc: R. E. Wills, Jr., 1633 Gateway

As we discussed, the subject easement was requested by Westinghouse from the City of Newark so that the Newark plant could install part of a sewage sampler system beneath a city sidewalk in a city sewer. The plant is required to sample its industrial wastewater discharged to the Passaic Valley Sewage Authority. Plant personnel wanted to be able to sample the discharge from three points at a single point where they combined. However, the flows do not combine on Westinghouse property; rather, they meet in the city sewer. Therefore, we obtained an easement from the City to install and operate a sampler system. As a condition of the easement, Westinghouse was required to indemnify the City from any claim arising from the granting of the privilege or by reason of the installation, location or maintenance of the existence of the system. Attached is a copy of the easement indenture, the ordinance granting the easement and the hold harmless and indemnification agreement.

The system includes an automatic sampler inside the plant and an underground galvanized conduit containing a sampling hose running from the plant about 20 feet to a city manhole. The system includes seals to prevent gas from entering the plant and all electrical components are located within the plant. Samples are obtained through a vacuum purge system and a sample is drawn through the sampling hose to the sampler inside the building.

I talked with Glenn Grant of the Newark Law Department regarding the possible termination of the easement prior to Westinghouse's sale of the Newark facility. Although he did not know the specific procedural steps for such termination he anticipates no problem. He recommends that Westinghouse write

832/8016344

845990292



D. R. Posy  
August 26, 1983  
Page -2

**PRIVILEGED**

a letter to Newark if and when we wish to terminate the easement. There probably would have to be a document filed cancelling the easement indenture which has been filed with the Essex County Register's office.

If you have any questions, I will be glad to be of assistance.

*Michele M. Gutman*

Michele M. Gutman  
Counsel

MMG:paj:1816C

Attachments

832/8016345

845990293

**Exhibit B**  
**Westinghouse Electric Corporation**

WHOLLY AND PARTIALLY OWNED SUBSIDIARIES OF  
WESTINGHOUSE ELECTRIC CORPORATION  
JULY, 1996

SUBSIDIARY	% OWNED BY PARENT
Aws Ansaldo (W) Service, SPA (Italy)	49.00
Bay County Energy Systems, Inc. (Delaware)	100.00
Bay Resource Management, Inc. (Delaware)	100.00
Bonneville Wind Corporation (Utah)	100.00
Catv Enterprises, Inc.* (New York)	100.00
Central Fidelity Insurance Company (Vermont)	100.00
Adept Technologies (California)	50.00
Comdata Holdings Limited (United Kingdom)	0.00
Commercial Union Leasing Corporation	0.00
Mojave Cogeneration Company, L.P.* (Delaware)	80.00
Communities IP Holdings, Inc. (Delaware)	100.00
Communities LP Holdings, Inc. (Delaware)	100.00
Computerized and Advanced Technologies Company* (Pennsylvania)	50.00
Contadores Electrico S.A. (Ecuador)	19.00
Corporate Fleet Leasing Company, Inc. (Delaware)	100.00
Dalian Refrigerator Works	0.00
Thermo King Dalian Transport Refrigeration Company, Limited* (Prc)	25.00
Delaware Resource Management, Inc. (Delaware)	100.00
Delki Van (India)	0.00
Dutchess Resource Management, Inc. (Delaware)	100.00
Eagle Crossing Corporation (Idaho)	0.00
Enhanced Building Services, Inc. (Delaware)	100.00
Mojave Cogeneration Company, L.P.* (Delaware)	18.00
Envesa Servicios, S.A. (Spain)	50.00
Fauske And Associates, Inc. (Illinois)	100.00
First Hotel Investment Corporation (Delaware)	100.00
First Westinghouse Capital Corporation (Delaware)	100.00
Rocky Mount Town Centre Associates, Limited Partnership* (Delaware)	51.00
Fortin Industries, Inc. (Delaware)	100.00
Gateway Fleet Company (Pennsylvania)	100.00
Group W Broadcasting, Inc.* (Delaware)	100.00
Group W Investments, Inc.	100.00
Westinghouse Pictures, Inc.* (Delaware)	100.00
Group W Cable Of Chicago, Inc. (Illinois)	100.00
Group W Radio Subsidiary Of California, Inc.* (California)	100.00
Grundstucks-Verwaltungs-Gesellschaft Genfer Strade mbH (Germany)	100.00

<u>SUBSIDIARY</u>	<u>% OWNED BY PARENT</u>
Home Team Sports Limited Partnership (Delaware)	100.00
Infrared Fiber Systems, Inc. (Delaware)	48.00
Innovative Computing Corporation* (Oklahoma)	100.00
Integrated Power Corporation (Maryland)	100.00
Ipc-Australia Pty. Ltd. (Australia)	100.00
IPC Ltd. (Papua New Guinea)	100.00
ITI Movats Incorporated (Delaware)	100.00
Jafco - Ltd. Partnership	2.77
Knoll International Japan Ltd.* (Japan)	34.59
O'Connor Combustor Corporation (California)	100.00
PCI Energy Services, Inc. (Illinois)	100.00
Peak FSC, Ltd. (Bermuda)	100.00
PM Services Inc. (Washington)	100.00
Powerserve International, Inc. (Delaware)	100.00
Precision Rebuilders, Inc. (Delaware)	100.00
Rocky Mount Town Associates	100.00
Rocky Mount Town Centre Associates, Limited Partnership* (Delaware)	49.00
Safe Sites of Colorado L.L.C. (Delaware)	65.00
San Juan Resource Management, Inc. (Delaware)	100.00
Servicios Industriales Westinghouse C.A. (Venezuela)	49.00
Seven-Up Bottling Co. Of Visalia (California)	100.00
Ship House, Inc. (Florida)	100.00
Siam Toracato De Tella, Ltd. (Uruguay)	5.90
Terra Neva Energy Corporation (Delaware)	100.00
The Scientific Ecology Group, Inc. (Tennessee)	100.00
Hittman Transport Services, Inc. (Delaware)	100.00
SEG Colorado, Inc. (Delaware)	100.00
SEG Equity Holdings, Inc. (Delaware)	100.00
Gregory Environmental Systems, L.P. (Delaware)	20.00
SEG Nevada, Inc. (Delaware)	100.00
Thermo King Corporation (Delaware)	100.00
Tsc, Inc. (Ohio)	100.00
Allied Media Technology, Inc. (California)	100.00
Turbinas Y Generadores Turgencia C.A. (Venezuela)	49.00
Two Productions, Inc.* (Delaware)	100.00
Vaktron S.A.* (Mexico)	24.50
Village Power Corporation (Delaware)	100.00

<u>SUBSIDIARY</u>	<u>% OWNED BY PARENT</u>
W-F Productions, Inc. (Delaware)	100.00
Waste Resource Energy, Inc. (Delaware)	100.00
Wb Bottling Corporation (Delaware)	15.00
WBCE, INC. (New York)	100.00
WCC FSC I, Inc. (Delaware)	100.00
WCC FSC III, INC. (US Virgin Islands)	100.00
WCC FSC IV, Inc. (US Virgin Islands)	100.00
WCC FSC IX, Inc. (US Virgin Islands)	100.00
WCC FSC V, Inc. (Bermuda)	100.00
WCC FSC VIII, Inc. (US Virgin Islands)	100.00
Wcc Project Corp. (Delaware)	100.00
Wcc Soledad I, Inc. (Delaware)	100.00
Wcc Soledad II, Inc. (Delaware)	100.00
Wesdyne International, Inc. (Delaware)	100.00
Wesgen, Inc. (Delaware)	100.00
Mojave Cogeneration Company, L.P.* (Delaware)	2.00
West Controls, Inc. (Delaware)	100.00
West Valley Nuclear Service Company, Inc. (Delaware)	100.00
Westinghouse (New Zealand) Ltd. (New Zealand)	100.00
Westinghouse Airships, Inc. (Delaware)	100.00
Westinghouse Surveillance Systems Limited* (United Kingdom)	90.00
Westinghouse Anlagenbau, GmbH (Germany)	100.00
Westinghouse Anniston Environmental Operations Company, Inc. (Delaware)	100.00
Westinghouse Audio Intelligence Devices, Inc. (Delaware)	100.00
Westinghouse Beverage Group, Inc. (Delaware)	100.00
Westinghouse Canada, Inc. (Canada)	100.00
913514 Ontario Inc. (Ontario, Canada)	100.00
177172 Canada Inc. (Canada)	100.00
Auprocom Limited/Limitee (Ontario, Canada)	100.00
B. F. Sturtevant Canada, Inc. (Canada)	100.00
Electrics, Inc. (Canada)	100.00
Quantum Inspection and Testing Limited (Ontario)	100.00
Wescan Europe Limited (Ireland)	100.00
Westinghouse Overseas Projects Company Inc. (Ontario)	100.00
Westinghouse CBS Holding Company, Inc. (Delaware)	100.00
CBS Inc. (New York)	100.00
Westinghouse Communication Services, Inc. (Delaware)	100.00

**SUBSIDIARY****% OWNED  
BY PARENT**

Westinghouse Communications, Inc. (Delaware)	100.00
Harbinger Edi Services, Inc. (Georgia)	17.50
Westinghouse Communications Software, Inc. (Delaware)	100.00
Commware Systems, Inc.* (Delaware)	15.00
Westinghouse Development And Management Corporation	100.00
Westinghouse do Brasil Comercio e Servicos Ltda. (Brazil)	100.00
Westinghouse Electric Company, S.A. (Delaware)	100.00
Servicios Westinghouse De Chile, Ltda.* (Chile)	1.00
Westinghouse Electric Dominicana S.A. (Dominican Republic)	100.00
Westinghouse Energy Systems - Japan, Inc. (Delaware)	100.00
Westinghouse Energy Systems, Inc. (Delaware)	100.00
Westinghouse Energy Systems Europe S.A.* (Belgium)	8.14
Westinghouse Environmental And Geotechnical Services, Inc. (North Carolina)	100.00
Westinghouse Remediation Services, Inc. (North Carolina)	100.00
Westinghouse Environmental Management Company Of Ohio, Inc. (Delaware)	100.00
Westinghouse Government Environmental Remediation Programs, Inc. (Delaware)	100.00
Safestates L.L.C. (Delaware)	100.00
Westinghouse Hanford Company (Delaware)	100.00
Westinghouse Holdings Corporation (Delaware)	100.00
Westinghouse De Puerto Rico, Inc. (Delaware)	100.00
Knoll De Puerto Rico, Inc. (Delaware)	100.00
Westinghouse Electric S.A. (Switzerland)	100.00
Airships Ltd. (United Kingdom)	2.66
Elektrik Technizati Imalati Tesisati, A.S. (Turkey)	4.23
Golden Rose Communications PLC (United Kingdom)	10.00
Hyosung Industries Co., Ltd.* (South Korea)	1.20
IC Enerco s.r.o. (Csfr)	33.00
International Capital Partners (Germany)	5.00
International Venture Partnership (Luxembourg)	6.28
ISCOSA Industries And Maintenance Ltd.* (Saudi Arabia)	75.00
Long Wei Power Generation Service Technology Company (Prc)	51.00
Modelpol, SP (Poland)	51.00
Raftrans, S.A.* (Spain)	60.00
Servicios Westinghouse De Chile, Ltda.* (Chile)	99.00
Servicios Westinghouse de Mexico S.A. de C.V. (Mexico)	99.00
Shanghai Controls United, Limited (Peoples Republic of China)	49.00
Societe Generale De Travaux Electriques* (France)	55.00

**SUBSIDIARY****% OWNED  
BY PARENT****Westinghouse Holdings Corporation  
Westinghouse Electric S.A. (continued)**

Thermo King Czech Republic, s.r.o.* (Czfr)	100.00
Thermo King Dalian Transport Refrigeration Company, Limited* (Prc)	70.00
Thermo King Do Brasil, Ltda. (Brazil)	100.00
Westinghouse Czech Republic s.r.o. (Czfr)	100.00
Westinghouse Electric (Asia) S. A., Zug (Switzerland)	100.00
Westinghouse Electric (Asia-Pacific) Holdings, Ltd. (Singapore)	100.00
Westinghouse Electric Singapore Ltd. (Singapore)	100.00
Westinghouse Electric (China) S.A., Zug (Switzerland)	100.00
Westinghouse Electric Australasia Limited* (Australia)	100.00
Westinghouse Electric Austria (Austria)	100.00
Westinghouse Electric Engineering And Trading, Ltd.* (Hungary)	90.00
Westinghouse Electric Europe Coordination Center, S.A.* (Belgium)	99.98
Westinghouse Electric GES MBH (Austria)	100.00
Westinghouse Electric GmbH, Birsfelden (Switzerland)	100.00
Westinghouse Electric Impianti, SRL* (Italy)	49.00
Westinghouse Electric GmbH, Frankfurt (Germany)	100.00
Westinghouse Electric Impianti, SRL* (Italy)	51.00
Westinghouse Electric Korea Ltd. (South Korea)	100.00
Westinghouse Electric Limited (United Kingdom)	100.00
PWR Power Projects, Ltd.* (United Kingdom)	50.00
Westinghouse Electric Poland Limited (Poland)	100.00
Westinghouse Electric S.P.A. (Italy)	100.00
Westinghouse Electric Spain, S.L. (Spain)	100.00
Westinghouse Electrique France, S.A. (France)	100.00
Societe Generale De Travaux Electriques* (France)	45.00
Westinghouse Energy Systems Europe S.A.* (Belgium)	90.00
Westinghouse Irish Holdings, Limited (Ireland)	100.00
Westinghouse Electric Ireland Limited (Ireland)	100.00
Westinghouse Electric Manufacturing Company, Limited (Ireland)	100.00
Westinghouse Saudi Arabia Ltd.* (Saudi Arabia)	90.00
Westinghouse Trading Company, Ltd. (Switzerland)	100.00
Westinghouse Electric Engineering And Trading, Ltd.* (Hungary)	10.00
Wti Advanced Technology Ltd.* (India)	39.90

SUBSIDIARY% OWNED  
BY PARENTWestinghouse Holdings (continued)

Westinghouse Gulf LLC (United Arab Emirates Branch)	49.00
Westinghouse International Technology Corporation (Delaware)	100.00
Westinghouse Investment Corporation (Delaware)	100.00
Westinghouse World Investment Corporation (Delaware)	100.00
Westinghouse Electric Europe Coordination Center, S.A.* (Belgium)	0.00
Westinghouse Foreign Sales Corporation (Barbados) (Barbados)	100.00
Westinghouse Idaho Nuclear Company, Inc. (Delaware)	100.00
Westinghouse Industry Products International Company, Inc. (Delaware)	100.00
Westinghouse Industry Services International Company, Inc. (Delaware)	100.00
Westinghouse Industry Services Asia Private, Ltd. (Singapore)	100.00
Westinghouse Industry Services Thailand Ltd.* (Thailand)	60.00
Westinghouse Industry Services Marketing, Ltd (Thailand)	100.00
Westinghouse Saudi Arabia Ltd.* (Saudi Arabia)	10.00
Westinghouse International Atomic Power S.A. (Switzerland)	100.00
Westinghouse International Power Systems Company, Inc. (Delaware)	100.00
Westinghouse International Projects Company (Delaware)	100.00
Westinghouse International Service Company, Limited (Delaware)	100.00
Westinghouse Ksc Co., Inc. (Delaware)	100.00
Westinghouse Landmark Gis, Inc. (Delaware)	100.00
Westinghouse Nuclear Japan, Inc (Delaware)	100.00
Westinghouse Operating Services Company (Delaware)	100.00
Westinghouse Pictures, Inc.* (Delaware)	100.00
Westinghouse Savannah River Company, Inc. (Delaware)	100.00
Westinghouse Security Electronics (California)	100.00
<del>Westinghouse Security Systems, Inc. (Delaware)</del>	<del>100.00</del>
Westinghouse Sistemas Energeticos Espana, Inc. (Delaware)	100.00
Westinghouse Staffing Services, Inc. (Delaware)	100.00
Westinghouse Superconducting Service Company	100.00
Westinghouse Surveillance Systems Limited* (United Kingdom)	10.00
Westinghouse Transport Leasing Corporation (Delaware)	100.00
<del>Wittnauer International Inc. (Delaware)</del>	<del>100.00</del>
WPIC Corporation (Delaware)	100.00
York Resource Energy Systems, Inc. (Delaware)	100.00

/=/

NOTE #1: \* designates entities with multiple parents.

NOTE #2 State/Country in parenthesis designates location of Incorporation



**Exhibit C**  
**Westinghouse Electric Corporation**